ORDER NO. MKE0403600C1

B6, B22

Service Manual

TV / DVD / VCR Combination

PV-DF204 / PV-DF2004 / PV-DF274 / PV-DF2704 / PV-DF2004-K / PV-DF2704-K

For servicing the R4-Mechanism Chassis for PV-Model, Please refer to the R4-Mechanism-Chassis-for-PV-Model Service Manual (Order No. MKE0401000C1).

PbF
Solder Lead free

SPECIFICATIONS

ITEM		SPECIFICATION	1	2
VCR	Video	Head: 4 rotary heads helical scanning system	○	○
		Input Level: VIDEO IN Jack (Phono type) 1.0 Vp-p 75 Ω unbalanced Output Level: VIDEO OUT Jack (Phono type) 1.0 Vp-p 75 Ω unbalanced Signal-to-Noise Ratio: SP: more than 43 dB LP/SLP: more than 41 dB	○	○
	Audio	Head: Normal Mono: 1 stationary head Hi-Fi Stereo: 2 rotary heads	○	○
		Input Level: AUDIO IN Jack (Phono type) -10 dBv 50 kΩ unbalanced Output Level: AUDIO OUT Jack (Phono type) -8 dBv 1 kΩ unbalanced	○	○
		Frequency Response: Normal Mono: SP: 100 Hz-8 kHz SLP: 100 Hz-5 kHz Hi-Fi Stereo: SP/LP/SLP: 20 Hz-20 kHz	○	○
		Signal-to-Noise Ratio: Normal Mono: SP: more than 42 dB SLP: more than 40 dB Hi-Fi Stereo: SP/SLP: more than 60 dB	○	○
		Wow and Flutter: Normal Mono: SP: Less than 0.2 % WRMS SLP: Less than 0.4 % WRMS Hi-Fi Stereo: SP/SLP Less than 0.015 % WRMS	○	○
	Tuner	Broadcast Channels: VHF 2~13, UHF 14~69 CABLE Channels: Midband A through I (14~22) Superband J through W (23~36) Hyperband AA~EEE (37~64) Lowband A-5~A-1 (95~99) Special CABLE channel 5A (01) Ultraband 65~94, 100~125	○	○
	Tape Speed	SP: 1-5/16 i.p.s (33.35 mm/s), SLP: 7/16 i.p.s (11.12 mm/s) Record/Playback Time: 8 hr. with 160 min. type tape used in SLP mode	○	○
	Tape Format	Tape width 12.7 mm (1/2 inch) high density tape	○	○
DISPLAY	Picture Tube	20 inch measured diagonal pure flat Picture Tube 27 inch measured diagonal pure flat Picture Tube	○ –	– ○

ITEM		SPECIFICATION	1	2
DVD	Discs Played	(1) DVD disc (DVD-Video, DVD-R): 12 cm (5 inch) single-sided, single-layer 12 cm (5 inch) single-sided, double-layer 12 cm (5 inch) double-sided, double-layer (one layer per side) 8 cm (3 inch) single-sided, single-layer 8 cm (3 inch) single-sided, double-layer 8 cm (3 inch) double-sided, double-layer (one layer per side) (2) DVD-RAM: 12 cm (5 inch) 9.4 GB (double-sided) and 4.7 GB (single-sided) 8 cm (3 inch) 2.8 GB (double-sided) (3) Compact disc (CD-DA, CD-R, CD-RW): 12 cm (5 inch) disc, 8 cm (3 inch) disc	○	○
	Digital Audio Output	Optical digital output: Optical connector	○	○
	Pickup	Wavelength: 655 nm (DVD), 790 nm (CD) Laser power: CLASS 1	○	○
GENERAL		Source: 120 V AC±12 V AC, 60 Hz±3 Hz	○	○
	Power	Consumption: Approx. 134 W (Power on), Approx. 1.5 W (Power off) Approx. 161 W (Power on), Approx. 1.5 W (Power off)	○ –	– ○
	Television System	EIA Standard (525 lines, 60 fields) NTSC Color Signal	○	○
	Speaker	2 pieces 3 W 2 pieces 5 W	○ –	– ○
	Operating Condition	5 °C-35 °C (41 °F-95 °F) (Temperature) 10 %-75 % (Humidity)	○	○
	Dimension (W x H x D)	604 mm x 523 mm x 503 mm (23-3/4 inch x 20-5/8 inch x 19-3/4 inch) 760 mm x 645 mm x 511 mm (29-7/8 inch x 25-3/8 inch x 20-1/8 inch)	○ –	– ○
	Weight	30.0 kg (66.1 lbs.) 49.0 kg (108.0 lbs.)	○ –	– ○
	Solder	This model uses lead free solder (PbF).	○	○

1. PV-DF204/ PV-DF2004/ PV-DF2004-K
2. PV-DF274/ PV-DF2704/ PV-DF2704-K

Weight and dimensions shown are approximate.
Designs and specifications are subject to change without notice.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

1. SAFETY PRECAUTIONS

1.1. GENERAL GUIDELINES

1. IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essentialthat these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

2. An Isolation Transformer should always be used during the

servicing of Combination DVD VCR whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resultingin personal injury from electrical shocks. It will also protect Combination DVD VCR from being damaged by accidental shorting that may occur during servicing.

3. **When servicing, observe the original lead dress, especially the lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.**
4. **After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shield, and isolation R-C combinations are properly installed.**
5. **Before turning the receiver on, measure the resistance between B+ line and chassis ground. Connect (-) side of an ohmmeter to the B + lines, and (+) side to chassis ground. Each line should have more resistance than specified,as follows :**

B+ Line
Minimum Resistance

130 V
110 Ω (Cold chassis ground)

28 V
180 Ω (Cold chassis ground)

220 V
1 k Ω (Cold chassis ground)

6. **When the TV set is not used for a long period of time, unplug the power cord from the AC outlet.**
7. **Potentials, as high as 33.0 kV (For model with 20 inch CRT), 32.0 kV (For model with Round 27 inch CRT), 33.0 kV (For model with Flat 27 inch CRT) are present when this TV set is in operation. Operation of the TV set without the rear cover involvesthe danger of a shock hazard from the TV set power supply. Servicing should not be attempted by anyone who is not thoroughly familiar with the precautions necessary when working on high voltage equipment.**

Always discharge the anode of the picture tubeto the CRT ground of receiver before handling the tube.

8. **After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.**

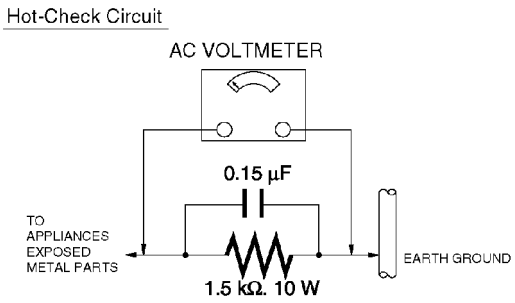
1.2. LEAKAGE CURRENT COLD CHECK

1. **Unplug the AC cord and connect a jumper between the two prongs on the plug.**
2. **For physically operated power switches, turn power on. Otherwise skip step 2.**
3. **Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screwheads, connectors, etc. When the exposed metallic part has a return path to the chassis, the readingshould be between 1 M Ω and 12 M Ω . When the exposed metal does not have a return path to the chassis, the reading must be infinity.**

1.3. LEAKAGE CURRENT HOT CHECK

1. **Plug the AC cord directly into the AC outlet.**
   Do not use a isolation transformer for this check.
2. **Connect a 1.5 k Ω , 10 W resistor, in parallel with a 0.15 μ F capacitor, between each exposed metallic part on the set and a good earth ground, as shown in Figure 1.**
3. **Use an AC voltmeter, with 1 k Ω /V or more sensitivity, to measure the potential across the resistor.**
4. **Check each exposed metallic part, and measure the voltage at each point.**
5. **Reverse the AC plug in the AC outlet and repeat each of the above measurements.**
6. **The potential at any point should not exceed 0.75 V RMS.**
   A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks. Leakage current must not exceed 1/2 mA. In case a measurement is outside of the limits specified, there is a possibility of shock hazard, and thereceiver should be repaired and rechecked before it is returned to the customer.

Figure 1



2. X-RADIATION

WARNING :

1. **The potential source of X-Radiation in TV sets is the High Voltage section and the picture tube.**
2. **When using a picture tube test fixture for service, ensure that the fixture is capable of handling 33.0 kV (For model with 20 inch CRT), 32.0 kV (For model with Round 27 inch CRT), 33.0 kV (For model with Flat 27 inch CRT) without causing X-Radiation.**

NOTE:

It is important to use an accurate periodically calibrated high voltage meter.

1. **Reduce the brightness to minimum.**
2. **Set the SERVICE switch to SERVICE.**
3. **Measure the High Voltage. The meter reading should indicate 28.0 kV±1.5 kV (For model with 20 inch CRT), 30.0 kV±2.0 kV (For model with Round 27 inch CRT), 31.0 kV±2.0 kV (For model with Flat 27 inch CRT).**
   If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
4. **To prevent an X-Radiation possibly, it is essential to use the specified picture tube.**

2.1. HORIZONTAL OSCILLATOR DISABLE CIRCUIT TEST

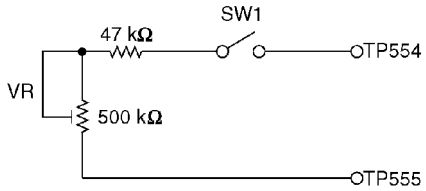
SERVICE WARNING :

The test must be made as a final check before set is returned to the customer.

CONFIRMATION OF X-RAY MOVEMENT

1. Turn off TV set.
2. Connect the circuit below between TP554 and TP555 on the TV Main C.B.A.

Figure 2



3. Turn on SW1 and then turn on the set. Confirm that the picture is on the screen properly.
4. Confirm that the picture goes out of horizontal sync while getting down by varying VR.
5. If this does not occur, it means that X-ray protect circuit is not operating. Further confirmation and repair is required.

2.2. REPAIR PROCEDURES OF HORIZONTAL OSCILLATOR DISABLE CIRCUIT

1. Connect a DC voltmeter between capacitor C513 (+) on the Main circuit board and chassis ground.
2. If approximately +18.5 V (For model with Round 20 inch CRT), + 21.5 V (For model with Flat 20 inch CRT), +22.0 V (For model with Round 27 inch CRT), +20.0 V (For model with Flat 27 inch CRT) is not presentat that point when 120 V AC is applied, find the cause. Check R508, R503, R5504, R5505, D503, C513, C5507 and J5501.
3. Carefully check above specified parts and related circuits and parts. When the circuit is repaired, try the horizontal oscillator disable circuit test again.

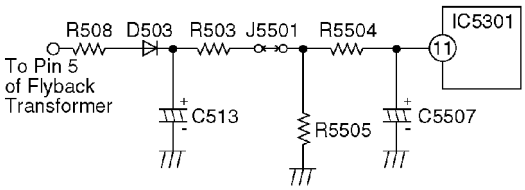
2.3. CIRCUIT EXPLANATION

2.3.1. HORIZONTAL OSCILLATOR DISABLE CIRCUIT

The positive DC voltage, supplied from the D503 cathode for monitoring high voltage, is applied to the IC5301 Pin11 through R508, R503 and R5504. Under normal conditions, the voltage at IC5301 Pin 11 is less than approx. 6 V. If the high voltageat Flyback Transformer Pin 5 exceeds the specified voltage, the positive DC voltage which is supplied from the D503 cathode also increases. The increased voltage is applied to IC5301 Pin11 through R508, R503 and R5504. Due to the increased voltageat IC5301 Pin11, the horizontal oscillator frequency increases, the picture goes out of horizontal sync, the beam current decreases and the picture become dark in order to

keep X-radiation under specification.

Figure 3



2.4. LASER PRODUCT

CLASS I LASER PRODUCT

- This equipment is certified to comply with DHHS Rules 21 CFR Chapter 1, Subchapter J in effect as of date of manufacture. (Only for U.S.A.)

This equipment is classified as a Class I (Class 1) level LASER Product and there is no hazardous LASER radiation with the safety protection.

Caution:

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Never touch the internal parts in order to avoid EXPOSURE TO VISIBLE LASER RADIATION.
Unplug the AC power cord to the equipment when opening the top cover.
When the power switch is On, do not place your eyes close to the front panel opening door or the other openings to look into the interior unit.
LASER Specification
Class I level A LASER Product (Class 1 level A LASER Product)

Wave Length:

647 - 677 nm (at DVD)
775 - 815 nm (at CD)

Laser Power:

No hazardous radiation is emitted with the safety protection.

2.5. PRECAUTION OF LASER DIODE

CAUTION:

This unit utilizes a class III a laser. Visible laser radiation is emitted from the optical pickup lens when the unit is turned on:

1. Do not look directly into the pickup lens.

2. Do not use optical instruments to look at the pickup lens.

3. Do not adjust the preset variable resistor on the optical pickup.

4. Do not disassemble the optical pickup unit.

5. **If the optical pickup is replaced, use the manufactures specified replacement pickup only.**
6. **Use of control or adjustment or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

3. PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistorsare semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or**

comparableconductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   CAUTION:

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD)sufficient to damage an ES device).

"NOTE to CATV system installer :

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding systemof the building, as close to the point of cable entry as practical."

4. ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF printing on the PCB.
(Please refer to figures.)

Printed case

CAUTION:

- Pb free solder has a higher melting point than standard solder;
  Typically the melting point is 50 °F - 70 °F (30 °C - 40 °C) higher.
  Please use a soldering iron with temperature control and adjust it to 700 °F±20 °F (370 °C± 10 °C).
  In case of using high temperature soldering iron, please be carefull not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100 °F/600 °C).
- All products with the printed circuit board with PbF stamp or printing must be serviced with lead free solder.
  When soldering or unsoldering, completely remove all of the solder from the pins or solder area,
  and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

Recommendations

Recommended lead free solder composition is Sn96.5 Ag3.0 Cu0.5.

5. SERVICE NOTES (PLEASE READ)

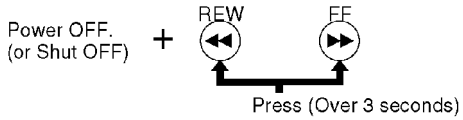
5.1. SERVICE NOTES

5.1.1. SELF-DIAGNOSIS INDICATION DISPLAY

Simplified Self-Diagnostic System facilitates finding the cause of the fault. The following data will be displayed on the TV screen.
The Error Code data is stored in the Memory IC (IC6004) (latest error only). This data is cleared after it is displayed, and then the POWER button is pressed back on.

1. With power turned off, press FF and REW buttons on the unit together for over 3 seconds.

Fig. 1-1



2. TV power comes on and the unit goes into service mode. The following codes will be displayed.

Fig. 1-2

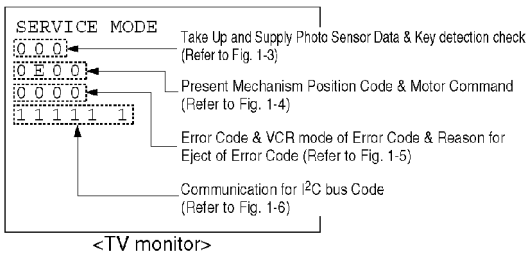
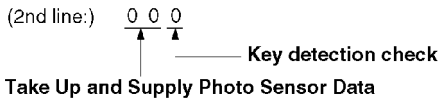
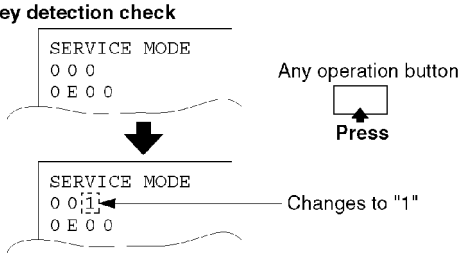

SERVICE MODE
0 0 0
0 E 0 0
0 0 0 0
1 1 1 1 1
Take Up and Supply Photo Sensor Data & Key detection check
(Refer to Fig. 1-3)
Present Mechanism Position Code & Motor Command
(Refer to Fig. 1-4)
Error Code & VCR mode of Error Code & Reason for
Eject of Error Code (Refer to Fig. 1-5)
Communication for I2C bus Code
(Refer to Fig. 1-6)
<TV monitor>

Fig. 1-3



Explanation of Codes	Code No.		
Take Up and Supply Photo Sensor Data			
• No light detected at either sensor.	0	0	
• Take Up Photo Sensor detected at beginning of tape.	0	2	
• Supply Photo Sensor detected at end of tape.	0	1	
• Light detected at both sensors.	0	3	

Key detection check



Note:

Press any operation button except for POWER or PLAY (DVD) on either the unit, or DVD key on the remote to detecet that a key has been pressed. The 3rd digit changes to “1” only when key is detected.

Fig. 1-4

(3rd line:) 0 E 0 0

Motor Command

Present Mechanism Position Code

Explanation of Codes	Code No.			
Present Mechanism Position Code				
• EJECT	0	E		
• DOWN	0	2		
• RREW	0	3		
• LOAD	0	4		
• REV	0	5		
• PLAY	0	6		
• POWER OFF	0	7		
• STOP R	0	8		
• STOP F	0	9		
• FF/REW	0	C		
• Intermediate positions between each positions	0	F		
Explanation of Codes	**Code No.**			
Motor Command				
• Cylinder OFF /Capstan OFF			0	
• Cylinder OFF /Capstan ON (FWD)			1	
• Cylinder OFF /Capstan OFF			2	
• Cylinder OFF /Capstan ON (REV)			3	
• Cylinder ON /Capstan OFF			8	
• Cylinder ON /Capstan ON (FWD)			9	
• Cylinder ON /Capstan OFF			A	
• Cylinder ON /Capstan ON (REV)			B	
• Loading Motor OFF				0
• Loading				1
• Unloading				2
• Capstan Brake				3

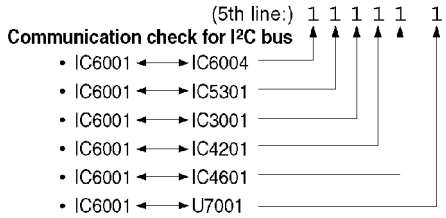
Fig. 1-5

(4th line:) 0 0 0 0

Reason for Eject of Error Code
VCR mode of Error Code
Error Code

Explanation of Codes		Code No.			
Error condition	**Remedy/Check**				
No Error		0	0		
CYL PFG pulse can not be detected when the Cylinder starts.	Please check the Cylinder motor, Cylinder drive circuit and CYL PFG signal circuit.	0	1		
CAP FG pulse can not be detected during the Mechanism Initial operation (Tape rewinding by the S-Reel) at DOWN position.	Please check the Capstan motor, Capstan drive circuit and CAP FG signal circuit	0	2		
Loading Lock during Loading operation at DOWN position.	Please check the Mechanism, Loading Motor, Drive circuit, Drive control signal circuit, Mode Select SW and the Mode Select SW input signal circuit.	0	3		
Loading Lock during Unloading operation at DOWN position.	Please check the Mechanism, Loading Motor, Loading Motor drive circuit, Loading motor drive control signal circuit, Mode Select SW and the Mode Select SW input signal circuit.	0	4		
S-reel pulse can not be detected during Unloading operation.	Please check the Mechanism S-reel system, S-reel sensor, S-reel sensor input signal circuit, Capstan motor, Capstan motor drive circuit, Capstan control signal circuit, and so on.	0	5		
Loading (cassette) Lock during Cassette Up operation.	Please check the Mechanism, Loading motor, Loading motor drive circuit, Loading motor drive control signal circuit, Mode Select SW and the Mode Select SW input signal circuit.	0	6		
Head clog detection.	Clean the Cylinder Head.	1	1		
The position signal from Mode Select SW can not be detected.	Check Mode Select SW contact.	1	4		
CAP FG pulse can not be detected during Cassette in operation.	Please check the Capstan motor, Capstan motor drive circuit and the CAP FG signal circuit.	1	5		
Cylinder Lock	Please check the Cylinder motor, Cylinder motor drive circuit and the CYL HSW signal circuit.	1	6		
S-reel Lock.	Please check Mechanism S-reel system, S-reel sensor, S-reel sensor input signal circuit, Capstan motor, Capstan motor drive circuit, Capstan control signal circuit, and so on.	1	7		
T-reel Lock.	Please check Mechanism T-reel system, T-reel sensor, T-reel sensor input signal circuit, Capstan motor, Capstan motor drive circuit, Capstan control signal circuit, and so on.	1	8		
Eject operation due to error condition.	Please check the Cassette tape, S-photo sensor, S-reel and Capstan system.	8	0		
VCR mode of Error Code • STOP • EJECT • REW • FF • REV • CUE • SLOW • POWER OFF • PLAY • STILL • REC • REC PAUSE				0 1 2 3 4 5 6 7 8 9 A B	
Reason for Eject of Error Code • No reason. • Cassette tape is off from S-Post at DOWN position. • Capstan motor can not rotate. • Mechanism Lock during Loading operation at DOWN position. • Both ends of tape is detected at DOWN position. • No reason.					0 1 2 3 4 C

Fig. 1-6



Explanation of Codes	Code No.						
Communication check for I²C bus (IC6001◄►IC6004) ----- NG	0						
OK	1						
Communication check for I²C bus (IC6001◄►IC5301) ----- NG		0					
OK		1					
Communication check for I²C bus (IC6001◄►IC3001) ----- NG			0				
OK			1				
Communication check for I²C bus (IC6001◄►IC4201) ----- NG				0			
OK				1			
Communication check for I²C bus (IC6001◄►IC4601) ----- NG					0		
OK					1		
Communication check for I²C bus (IC6001◄►U7001) ----- NG							0
OK							1

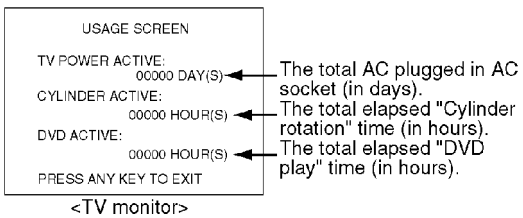
5.1.2. USAGE SCREEN MODE

This function is displayed on the TV monitor:

- the total AC plugged in AC socket (in days)
- the total elapsed "Cylinder rotation" time (in hours)
- the total elapsed "DVD play" time (in hours).

1. With power turned and no cassette, press STOP/EJECT button on VCR and 7 key on remote together.
The USAGE SCREEN will be displayed on the TV Monitor.

Fig. 2


USAGE SCREEN
TV POWER ACTIVE:
00000 DAY(S)
CYLINDER ACTIVE:
00000 HOUR(S)
DVD ACTIVE:
00000 HOUR(S)
PRESS ANY KEY TO EXIT
The total AC plugged in AC socket (in days).
The total elapsed "Cylinder rotation" time (in hours).
The total elapsed "DVD play" time (in hours).

<TV monitor>

Note:

1. After replacing the Cylinder Unit, press COUNTER RESET button on remote in this mode. Only Total elapsed "Cylinder rotation" time (in days) will be cleared to 0.

2. After replacing the DVD Unit, press ADD/DLT button on remote in this mode. Only Total elapsed time "DVD Play" time (in hours) will

be cleared to 0.

3. To release from Usage Screen Mode, press any operation button on VCR or insert a cassette tape in this mode. VCR will return to normal operation mode.

5.1.3. GROUNDING FOR ELECTROSTATIC BREAKDOWN

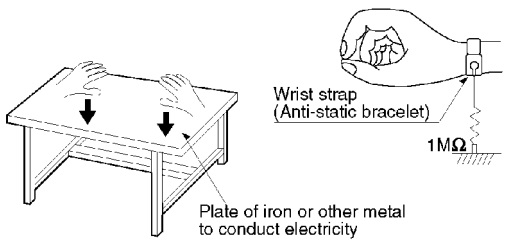
Prevention

1. Human body grounding
   Use the antistatic wrist strap to discharge the static electricity from your body.
2. Work table grounding
   Put a conductive material (sheet) or steel sheet on the area where the optical pickup is placed and ground the sheet.

Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So take care not to let your clothes touch the optical pickup.

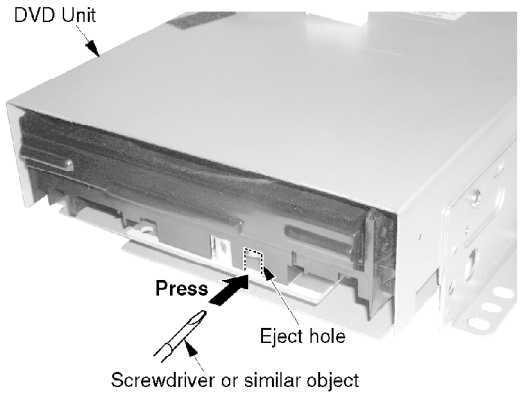
Fig. 3



5.1.4. METHOD FOR EJECTING THE DVD TRAY MANUALLY

1. Insert a Screwdriver or similar object into the Eject hole.
2. Press it gently, and then pull the Tray fully out.

Fig. 4



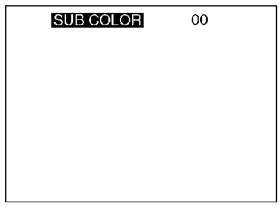
5.1.5. DVD SERVICE MODE

This unit has a Self-Diagnostic function which detects a problem or malfunction within the unit and displays on the TV screen.

5.1.5.1. How to enter DVD Service Mode

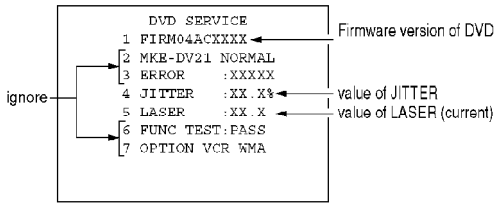
1. **Set the unit to DVD mode.**
2. **Press and hold STOP/EJECT, PLAY/REPEAT, and VOL - buttons of VCR operation panel of the unit together for over 5 seconds with no cassette inserted. The adjustment overlay will appear on the TV screen.**

Fig. 5-1



3. **Press DISPLAY key on the remote control to enter the DVD Service Mode.**

Fig. 5-2

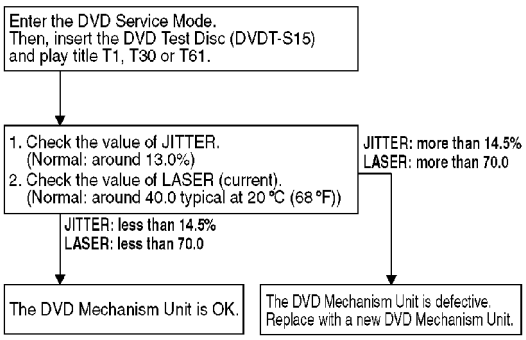


4. **To confirm the value of JITTER and the value of LASER (current), insert the DVD Test Disc into the DVD Unit.**
5. **To release from this mode, turn off the power.**

5.1.5.2. Troubleshooting hint (standard) for this mode

It can be determine if the DVD Mechanism Unit is defective by checking the value of JITTER and the value of LASER (current).

Fig. 5-3


Enter the DVD Service Mode.
Then, insert the DVD Test Disc (DVDT-S15)
and play title T1, T30 or T61.
1. Check the value of JITTER.
(Normal: around 13.0%)
2. Check the value of LASER (current).
(Normal: around 40.0 typical at 20 °C (68 °F))
JITTER: more than 14.5%
LASER: more than 70.0
JITTER: less than 14.5%
LASER: less than 70.0
The DVD Mechanism Unit is OK.
The DVD Mechanism Unit is defective.
Replace with a new DVD Mechanism Unit.

5.1.6. SERVICE POSITION

Service Position	Purpose
Service Position (1)	DVD Main C.B.A. check
Service Position (2)	TV Main C.B.A. check
Service Position (3)	Mechanism check Mechanical adjustment Electrical adjustment Power Supply C.B.A. check
Service Position (4)	Main C.B.A. check All C.B.A.s check

CAUTION:

HOT CIRCUIT (Primary circuit) exists on the Power Supply C.B.A. and the TV Main C.B.A.
Use extreme care to prevent accidental shock when servicing.

Note:

When carrying out loading of the cassette tape, if light is strong, a tape may not carry out loading. Please shade a Mechanism top or weaken lighting.

5.1.6.1. How to make Service Position for Combination DVD VCR models

To make these Service Position, the following 6 Extension Cables are necessary.

(For model with Flat CRT) Extension Cable Kit	LSUA0052
• Extension Cable 2P P4506 (Main C.B.A.) ~ P850 (TV Main C.B.A.)	LSUA0051
• Extension Cable 13P P4005 (Main C.B.A.) ~ P4701 (Operation C.B.A.) P4003 (Main C.B.A.) ~ P7002 (Power Supply C.B.A.) P4004 (Main C.B.A.) ~ P9501 (Power Supply C.B.A.)	LSUA0047 (3 pcs)
• Extension Cable 16P P4601 (Main C.B.A.) ~ P8401 (DVD Main C.B.A.)	LSUA0048
• Extension Cable 19P P5401 (Main C.B.A.) ~ P501 (TV Main C.B.A.)	LSUA0049

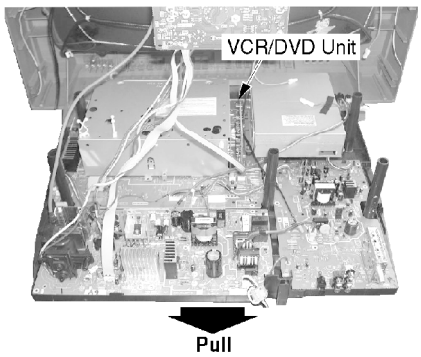
(For model with Round CRT)

Extension Cable Kit	LSUA0053
• Extension Cable 2P P4506 (Main C.B.A.) ~ P850 (TV Main C.B.A.)	LSUA0051
• Extension Cable 7P P4004 (Main C.B.A.) ~ P9501 (Power Supply C.B.A.)	LSUA0050
• Extension Cable 13P P4005 (Main C.B.A.) ~ P4701 (Operation C.B.A.) P4003 (Main C.B.A.) ~ P7002 (Power Supply C.B.A.)	LSUA0047 (2 pcs)
• Extension Cable 16P P4601 (Main C.B.A.) ~ P8401 (DVD Main C.B.A.)	LSUA0048
• Extension Cable 19P P5401 (Main C.B.A.) ~ P501 (TV Main C.B.A.)	LSUA0049

5.1.6.1.1. Service Position (1)

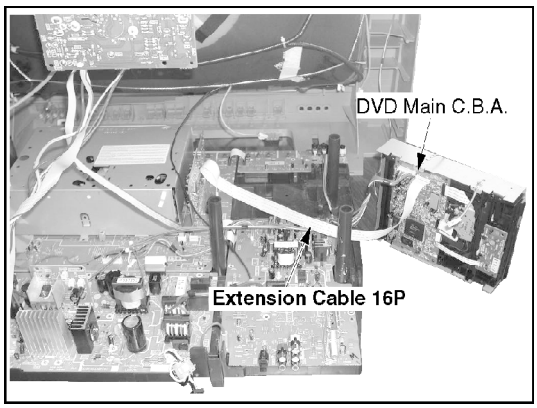
1. Remove the Rear Cover. Then, pull the VCR/DVD Unit.

Fig. 6-1



2. Remove the DVD Unit, and connect the DVD Unit using the Extension Cable 16P.

Fig. 6-2

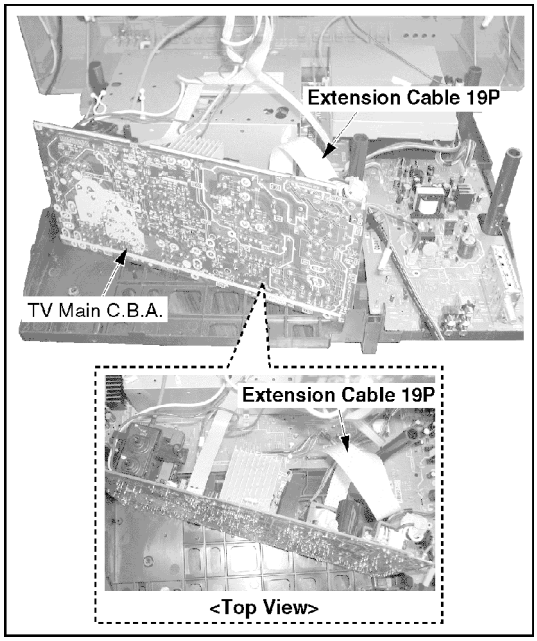


5.1.6.1.2. Service Position (2)

1. Perform step 1 in Service Position (1) as shown in Fig. 6-1.

2. Raise the TV Main C.B.A. and connect it using the Extension Cable 19P.

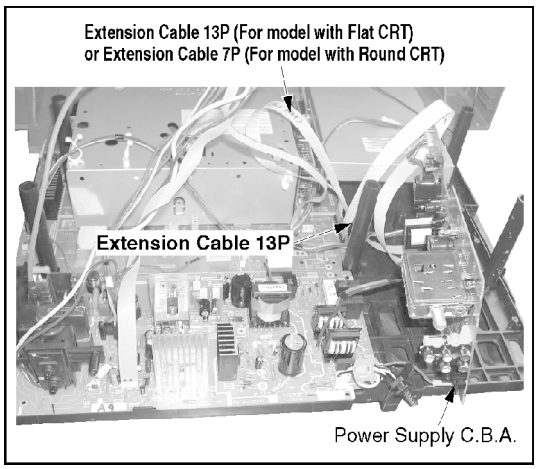
Fig. 6-3



5.1.6.1.3. Service Position (3)

1. Perform step 1 in Service Position (1) as shown in Fig. 6-1.
2. Raise the Power Supply C.B.A. and connect it using the 2 Extension Cables 13P (or 7P).

Fig. 6-4


Extension Cable 13P (For model with Flat CRT)
or Extension Cable 7P (For model with Round CRT)
Extension Cable 13P
Power Supply C.B.A.

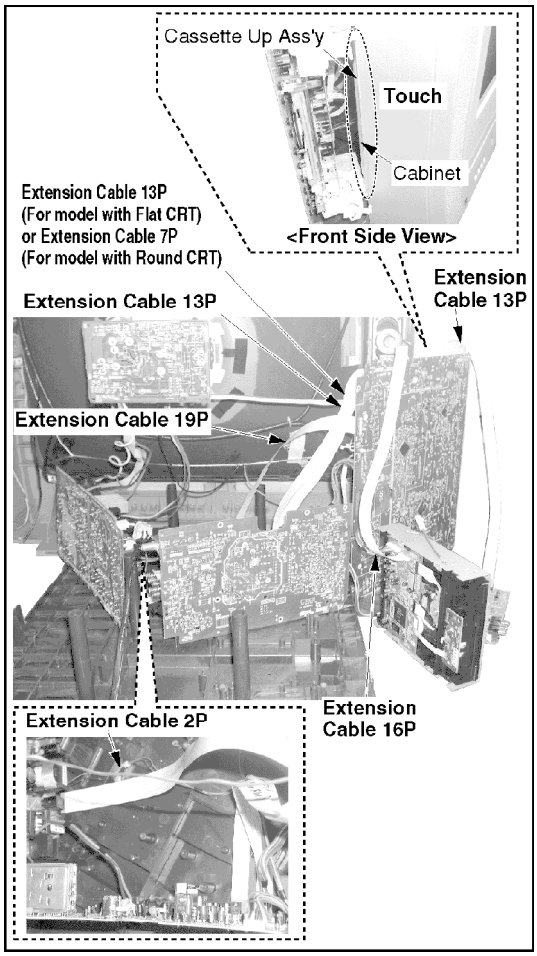
5.1.6.1.4. Service Position (4)

1. Perform step 1 in Service Position (1) as shown in Fig. 6-1.
2. Turn the VCR/DVD Unit to the right.
3. To service the Main C.B.A.:
   Remove the Main C.B.A. with the Mechanism, and place the Main C.B.A. with the Mechanism so the top of the Cassette Up Ass'y touches to the edge of the Cabinet in order to avoid the removal of

the Mechanism from the Main C.B.A.
Then, raise the Power Supply C.B.A. and connect the Main C.B.A. using the 5 Extension Cables 2P, 7P, 13P, 19P.

4. **To service the all C.B.A.s:**
   Raise the TV Main C.B.A. and connect the DVD Unit using the Extension Cable 16P.

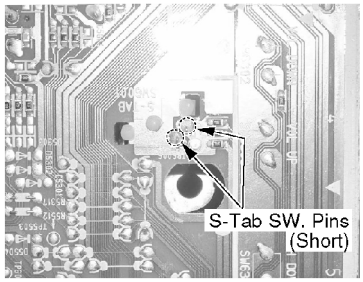
Fig. 6-5



Note:

It is possible that the S-Tab SW. may not work correctly in Service Positions (4). (Recording can not be done). In this case, short the S -Tab SW. Pins on the foil side of Main C.B.A. to turn this SW. on.

Fig. 6-6



<Main C.B.A. (foil side)>

Alternative method:
Cover the S-Tab SW. with masking tape.

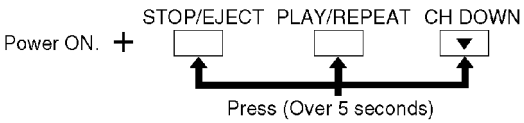
5.1.7. HOT CIRCUIT

Primary circuit exists on the Power Supply C.B.A. and the TV Main C.B.A.
This circuit is identified as " HOT " on the C.B.A. and in the Service Manual. Use extreme care to prevent accidental shock when servicing.

5.1.8. SERVICE MODE

In order to inhibit detection of the Supply & Takeup Photo Transistors, Reel Sensor, and Cylinder Lock can be inhibited. In this mode, Mechanism movement can be confirmed. When removing Cassette Up Ass'y, it can be confirmed withouta cassette.
To enter Service Mode:
Press and hold STOP/EJECT, PLAY/REPEAT, and CH DOWN buttons on the unit together over 5 seconds in power on condition.The unit goes into Service Mode.

Fig. 7-1

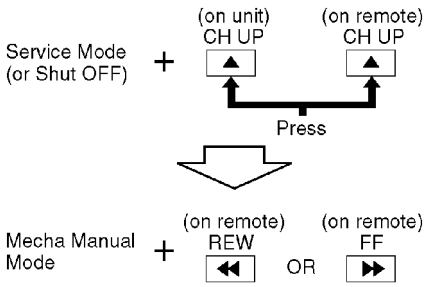


To release from this mode, disconnect AC Plug.

5.1.9. MECHA MANUAL MODE

In shut off condition or in Service Mode, press the CH UP on the unit and CH UP buttons on the remote together without a cassette.
In this mode, Loading or Unloading operation can be confirmed by pressing the REW/SLOW or FF/ SLOW button on the remote.

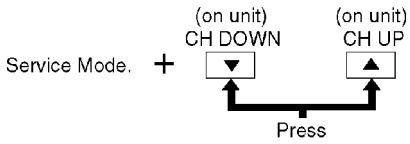
Fig. 7-2



5.1.10. TRACKING CENTER MODE (TRACKING FIX AT CENTER)

Insert the Cassette tape. Set the unit into Service Mode.
Press CH UP on the unit and CH DOWN buttons on the remote together in play back mode.
In this mode, the tracking is fixed at center. (Auto tracking and manual tracking functions are not operational.)

Fig. 8



5.1.11. DEFEATING THE AUTO TRACKING

To defeat the Auto Tracking Function, place the instrument in the STOP mode and place a jumper between TP6003 and TP6009 on the Main C.B.A. The tracking will be placed in the neutral position.

5.1.12. CAUTION FOR INSTALLATION OF VCR / DVD ASS ' Y

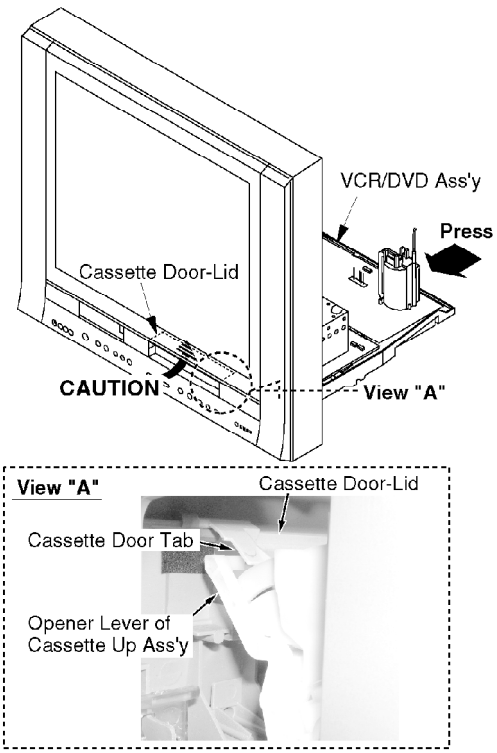
CAUTION:

Opener Lever may be damaged when VCR/DVD Ass'y is installed, with Cassette Door-Lid and Opener Lever of Cassette Up Ass'y set incorrectly.

Install the VCR/DVD Ass'y as follows:

1. **Swing the Cassette Door-Lid all the way open until the Cassette Door tab clears the Opener Lever.**
2. **Make sure that all guide tabs are aligned properly. Then, press the VCR/DVD Ass'y straight in.**

Fig. 9

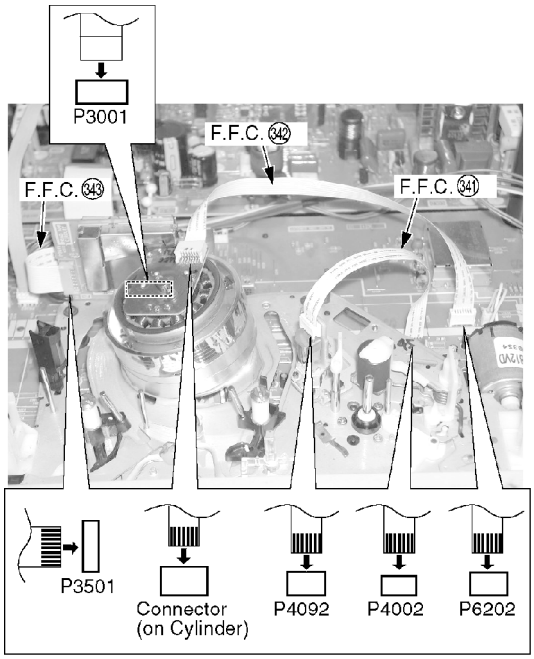


5.1.13. F.F.C. CONNECTION NOTE

5.1.13.1. F.F.C. between the Mechanism and the Main C.B.A.

Be careful with the direction of F.F.C.s to connectors as shown.

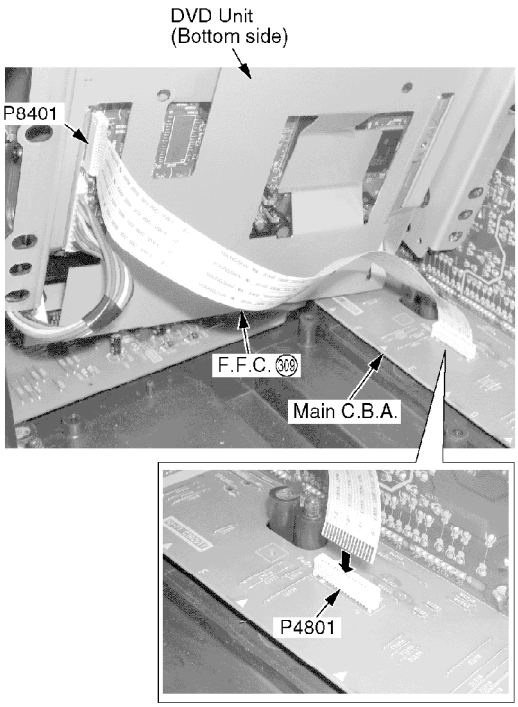
Fig. 10



5.1.13.2. F.F.C. between the DVD Unit (DVD Main C.B.A.) and the Main C.B.A.

Be careful with the direction of F.F.C. to connector as shown.

Fig. 11



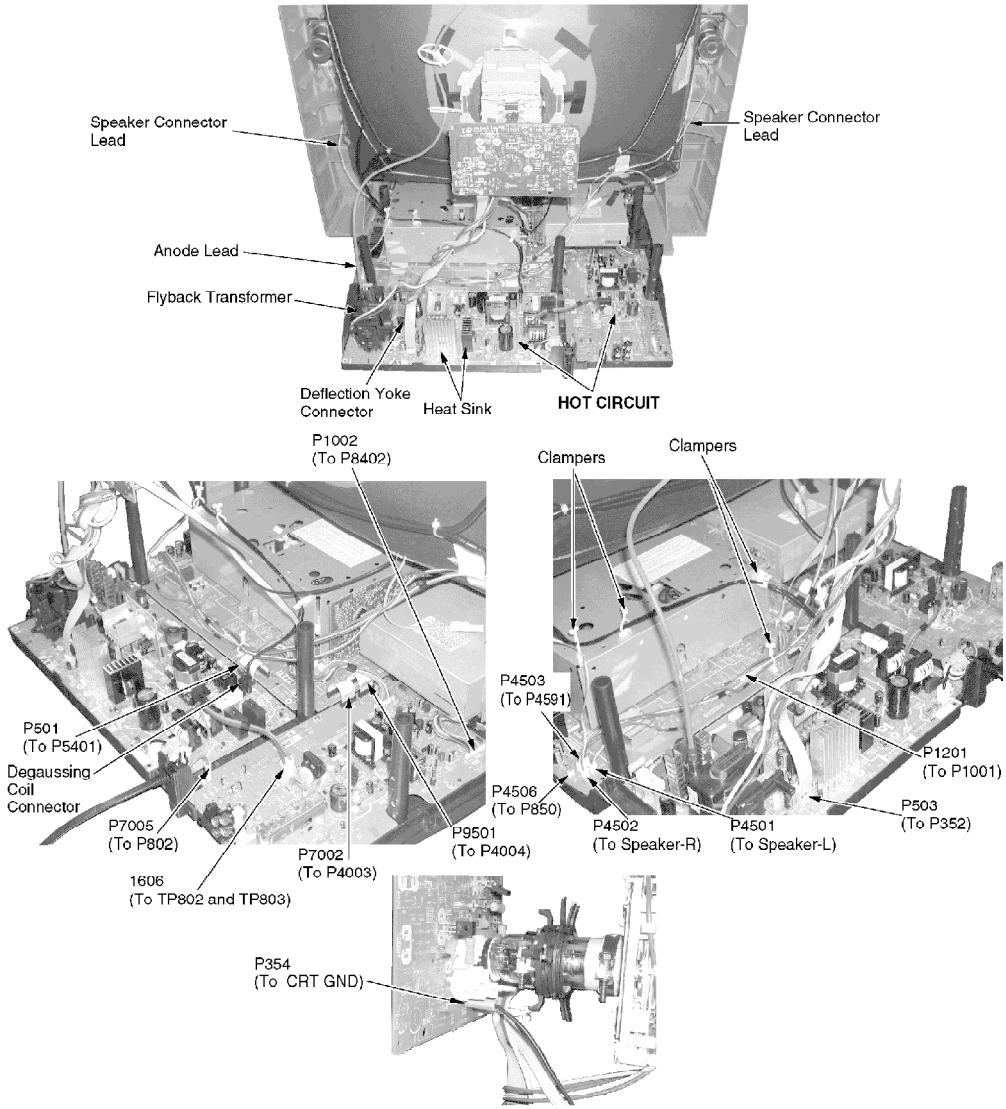
5.1.14. WIRE AND LEAD POSITION DIAGRAM

Fig. 12

After servicing, make sure that all wires, leads, and clampers are placed in their original position. It is important for the best operation of the unit.

Note:

No lead wires or flat cables should touch any heating parts or the Heat Sink Plate.
Use extreme care especially for followings.



5.1.15. HOW TO SET TRACKING TO THE NEUTRAL POSITION

Ejecting the cassette tape and then reinserting it will reset the tracking to the Neutral position.

5.1.16. BLACK SCREWS ON THE CHASSIS

Black Screws are used on the Mechanism Chassis to identify screws that require adjustment.

5.1.17. HOW TO RESET ALL COMBINATION DVD VCR MEMORY FUNCTIONS

To reset (clear) the select language, channel auto set and set clock functions to their initial power on condition (power on, no cassette inserted), hold down the PLAY/REPEAT and FF buttons of VCR operation panel on the unit together formore than 5 seconds.
Power will shut off.

5.1.18. HOW TO CONFIRM AUTO CLOCK SET FEATURE

1. Connect an RF cable from the output of one unit to the input of the

test unit.

2. Select corresponding RF channels.

3. Playback a recording of P.B.S. channel including clock set data and confirm this feature.

5.1.19. VARIABLE VOLTAGE ISOLATION TRANSFORMER

An Isolation Transformer should always be used during the servicing of Combination DVD VCR whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resultingin personal injury from electrical shocks. It will also protect Combination DVD VCR from being damaged by accidental shorting that may occur during servicing.
Also, when troubleshooting the above type of Power Supply Circuit, a variable isolation transformer is required in order to increase the input voltage slowly.

5.1.20. SPECIAL NOTE

All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.

5.1.21. MODEL NO. IDENTIFICATION MARK

Use Marks shown in the chart below to distinguish the different models included in this Service Manual.

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

Note:
Refer to Item 3 of Schematic Diagram Notes of Schematic Diagram and Circuit Board Layout Notes, for mark "PT."

6. DISASSEMBLY / ASSEMBLY PROCEDURES

6.1. CABINET SECTION

6.1.1. Disassembly Flowchart

Perform all disassembly procedures in the order described in the "Disassembly Flowchart" shown below.
When reassembling, use the reverse procedure.

CAUTION:

Disconnect AC plug before disassembly.

Fig. D1

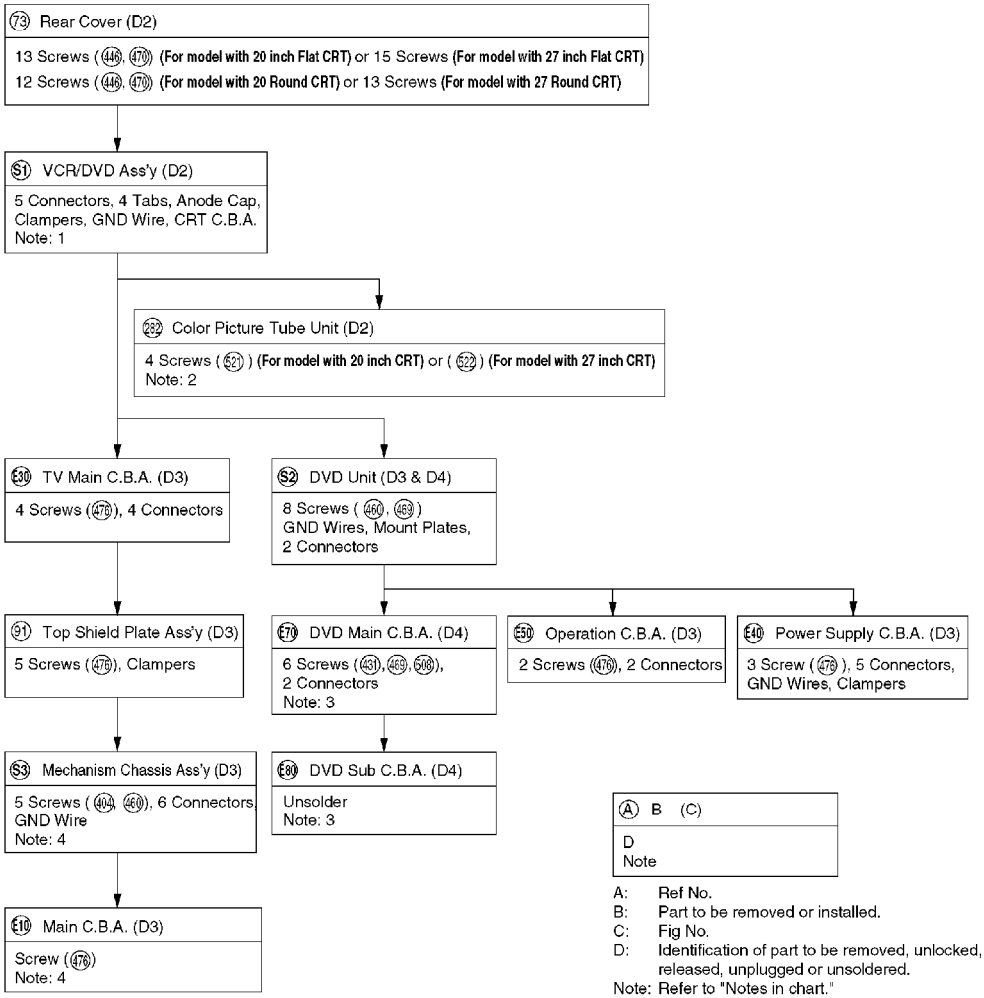

(73) Rear Cover (D2)
13 Screws ((446), (470)) (For model with 20 inch Flat CRT) or 15 Screws (For model with 27 inch Flat CRT)
12 Screws ((446), (470)) (For model with 20 Round CRT) or 13 Screws (For model with 27 Round CRT)
(S1) VCR/DVD Ass'y (D2)
5 Connectors, 4 Tabs, Anode Cap, Clampers, GND Wire, CRT C.B.A.
Note: 1
(282) Color Picture Tube Unit (D2)
4 Screws ((521)) (For model with 20 inch CRT) or ((522)) (For model with 27 inch CRT)
Note: 2
(E30) TV Main C.B.A. (D3)
4 Screws ((476)), 4 Connectors
(S2) DVD Unit (D3 & D4)
8 Screws ((460), (469))
GND Wires, Mount Plates,
2 Connectors
(91) Top Shield Plate Ass'y (D3)
5 Screws ((476)), Clampers
(E70) DVD Main C.B.A. (D4)
6 Screws ((431), (469), (508)),
2 Connectors
Note: 3
(E50) Operation C.B.A. (D3)
2 Screws ((476)), 2 Connectors
(E40) Power Supply C.B.A. (D3)
3 Screw ((476)), 5 Connectors,
GND Wires, Clampers
(S3) Mechanism Chassis Ass'y (D3)
5 Screws ((404), (460)), 6 Connectors,
GND Wire
Note: 4
(E80) DVD Sub C.B.A. (D4)
Unsolder
Note: 3
(E10) Main C.B.A. (D3)
Screw ((476))
Note: 4
(A) B (C)
D
Note
A: Ref No.
B: Part to be removed or installed.
C: Fig No.
D: Identification of part to be removed, unlocked, released, unplugged or unsoldered.
Note: Refer to "Notes in chart."

Fig. D2

IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
---------	G
---------	H
---------	I

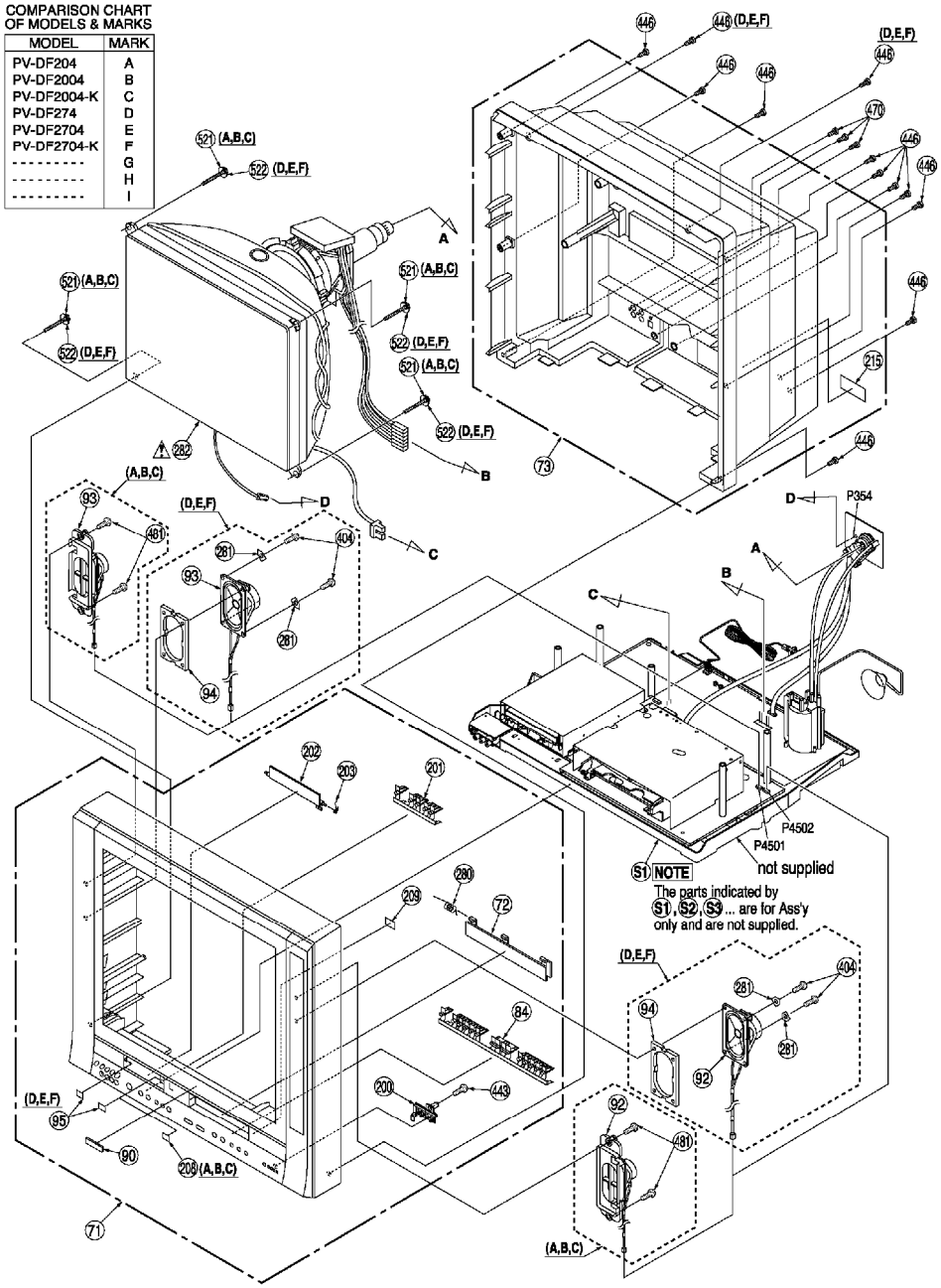


Fig. D3

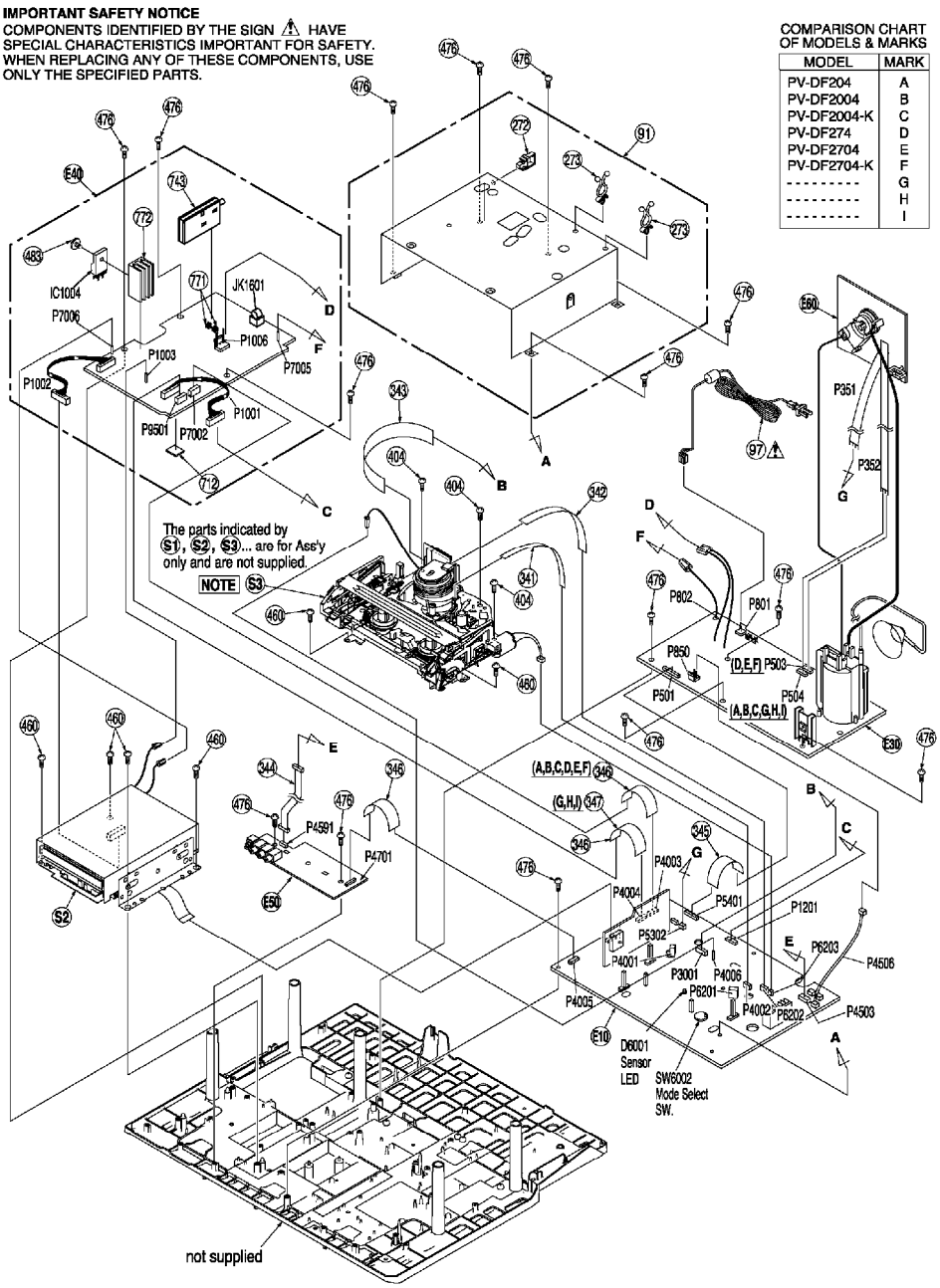
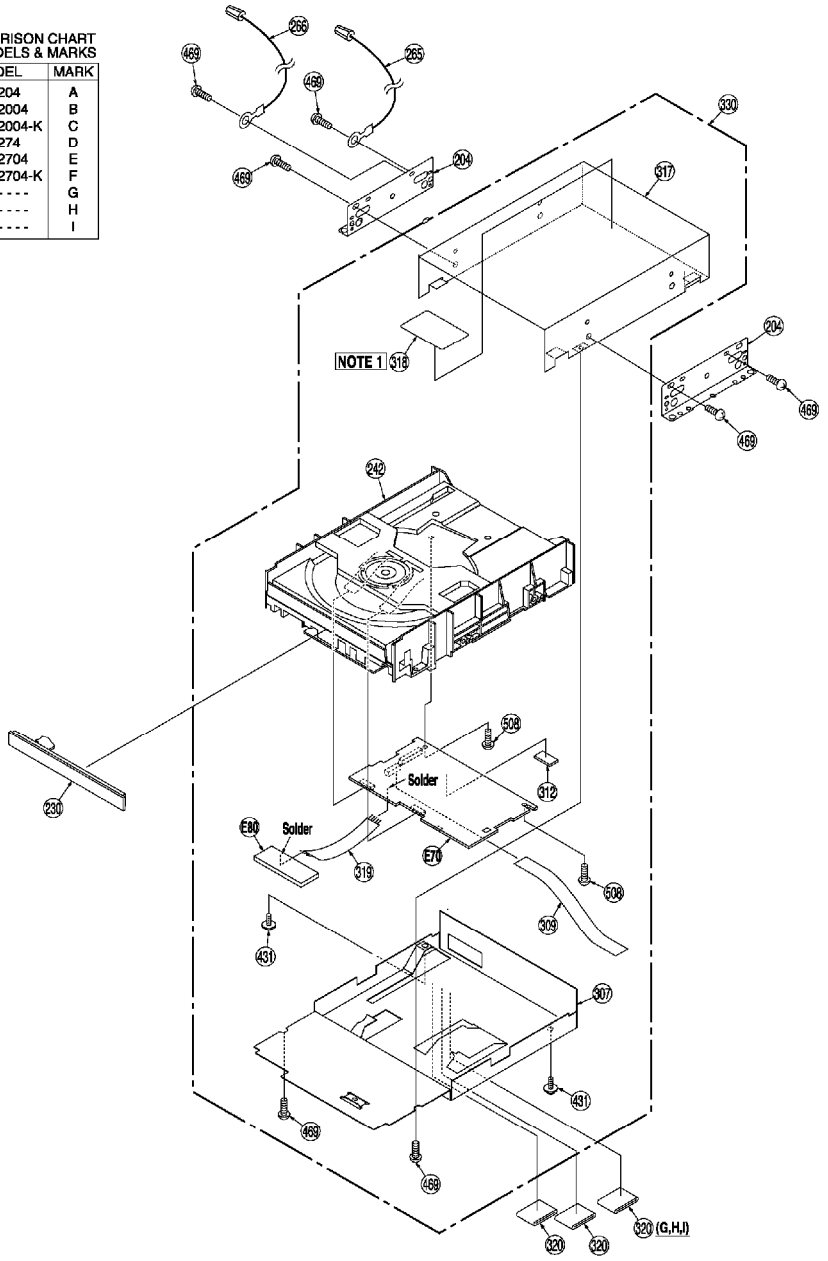

IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.
COMPARISON CHART OF MODELS & MARKS
MODEL | MARK
PV-DF204 | A
PV-DF2004 | B
PV-DF2004-K | C
PV-DF274 | D
PV-DF2704 | E
PV-DF2704-K | F
---------- | G
---------- | H
---------- | I
The parts indicated by (S1), (S2), (S3)... are for Ass'y only and are not supplied.
NOTE
not supplied
IC1004
JK1601
P7006
P1003
P1006
P7005
P1002
P1001
P9501
P7002
P351
P352
P802
P801
P850
P503
P501
P504
P4591
P4701
P4003
P4004
P5401
P1201
P5302
P4001
P3001
P4006
P6203
P4506
P6201
P4002
P6202
P4503
P4005
D6001 Sensor LED
SW6002 Mode Select SW.

Fig. D4

COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
----------	G
----------	H
----------	I

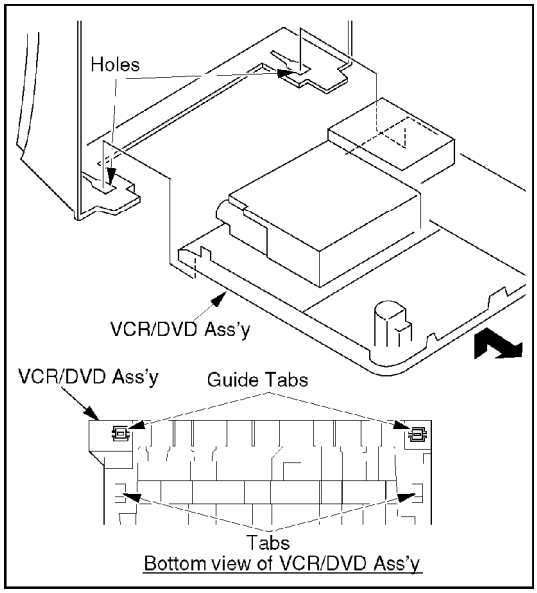


NOTE 1: When replacing the DVD Frame (Ref. No. 317), be sure to place the Rating Label (Ref. No. 318) on it.

6.1.1.1. Notes in chart

1. Removal of VCR/DVD Ass'y

Fig. D5



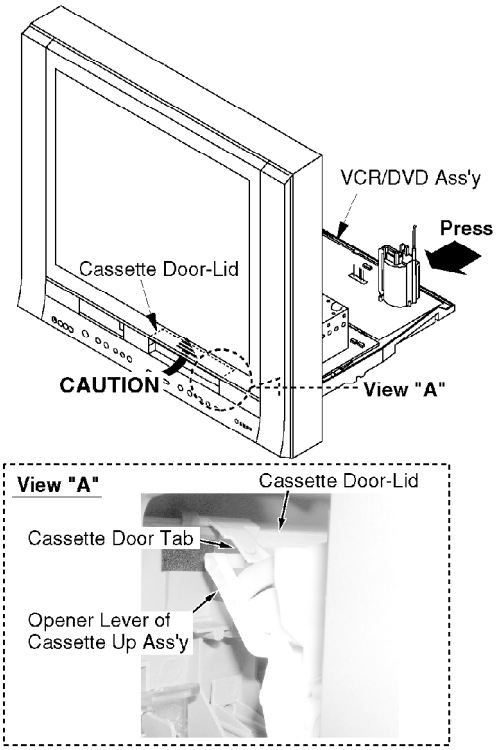
Installation of VCR/DVD Ass'y

CAUTION:

Opener Lever may be damaged when VCR/DVD Ass'y is installed, with Cassette Door-Lid and Opener Lever of Cassette Up Ass'y set incorrectly.

1. **When installing the VCR/DVD Ass'y, swing the Cassette Door-Lid all the way open until the Cassette Door tab clears the Opener Lever.**
2. **Make sure that all guide tabs are aligned properly.**
   Then, press the VCR/DVD Ass'y straight in.

Fig. D6



2. Removal of Color Picture Tube Unit

Place the Unit face down on a soft cloth before removing the Color Picture Tube Unit.

3. Removal of DVD Sub C.B.A.

A. Remove solder portions "a," "b," and "c" on the DVD Sub C.B.A.

B. Remove the DVD Sub C.B.A. while releasing the Locking Tab.

Installation of DVD Main C.B.A. and DVD Sub C.B.A.

A. Confirm that the Lever A is positioned as shown, and install the DVD Sub C.B.A. with the Locking Tab and 2 bosses.

B. Install the DVD Main C.B.A. with the Locking Tab and the rib.

C. Solder portions "a," "b," "c" and "d" on the C.B.A.

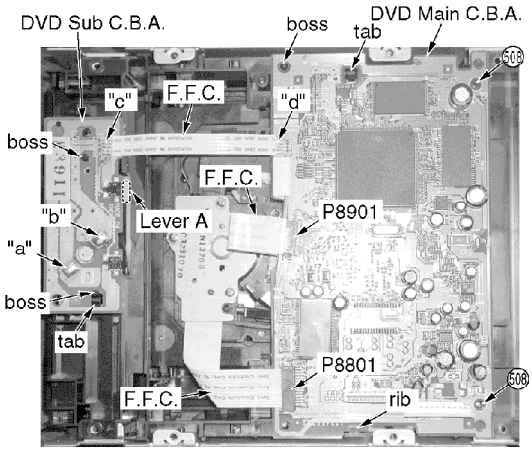
Note:

Solder portions "a" and "b" while pushing down the DVD Sub C.B.A. securely.

D. Connect the F.F.C.s to Connectors P8901, P8801 on the DVD Main C.B.A.

E. Tighten the 2 Screws (508).

Fig. D7

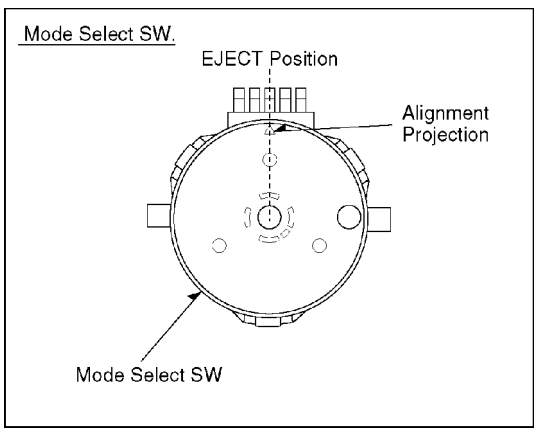


<Bottom View>

4. Installation of Mechanism Chassis and Cassette Up Ass'y onto Main C.B.A.

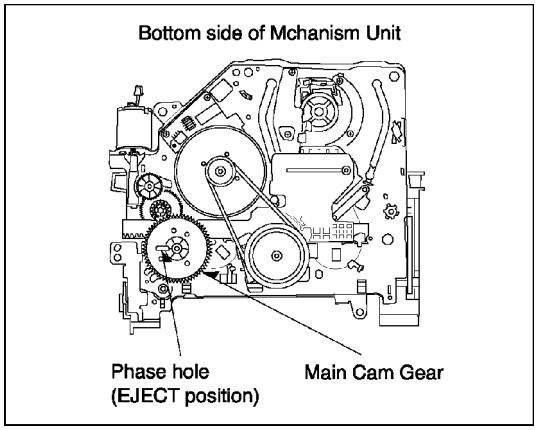
A. Make sure the Mode Select SW. on the Main C.B.A. is in EJECT position. If not, rotate the Mode Select SW. until the alignment projection is in the EJECT Position.

Fig. D8



B. Make sure the phase hole of the Main Cam Gear on the bottom side of the Mechanism Unit is in EJECT Position.

Fig. D9



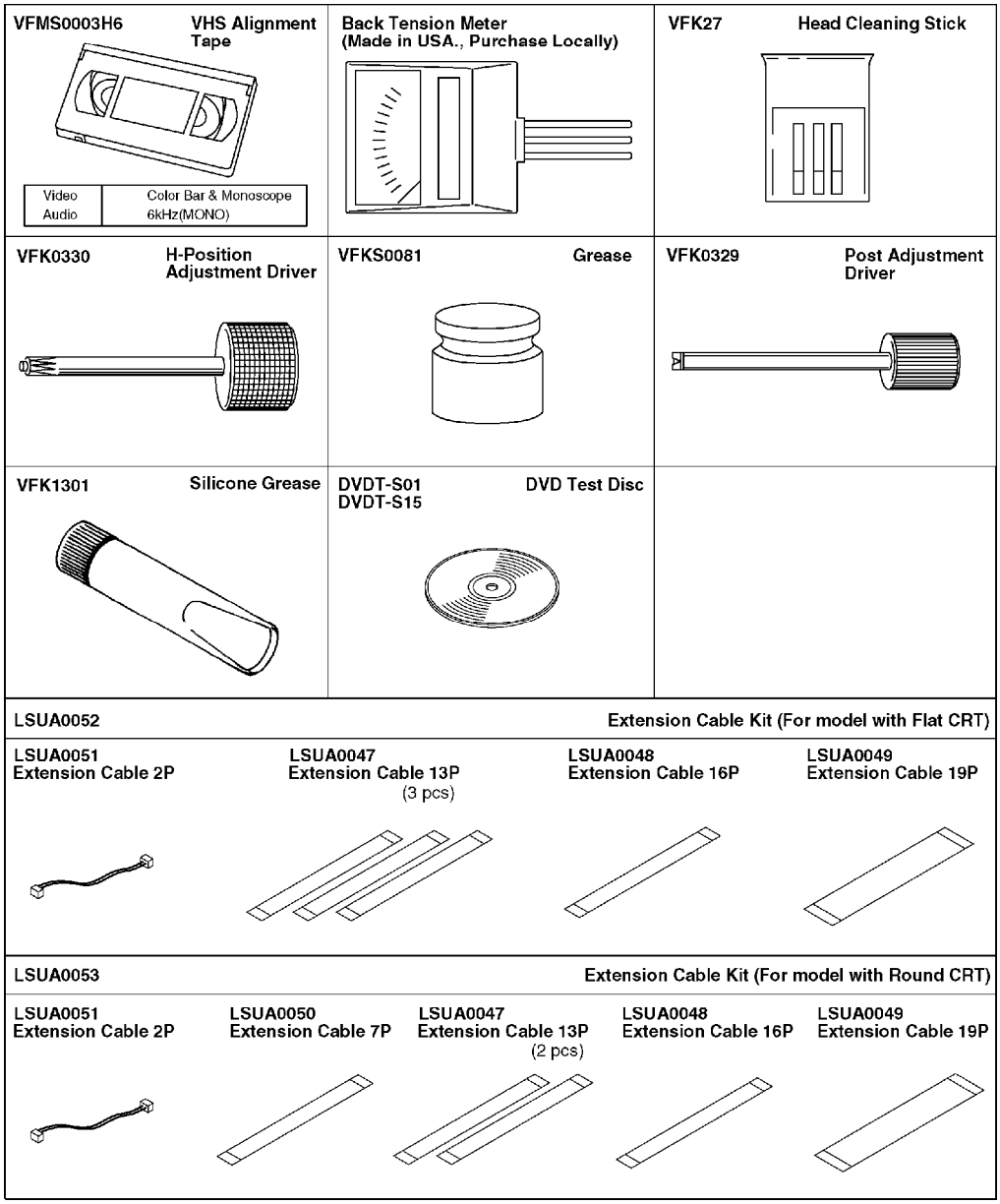
C. Install the Mechanism Chassis straight onto the Main C.B.A. so that the Sensor LED clears the hole in the Mechanism Chassis and that 2 Connectors (P6201 and P4001) are aligned and seated securely.

6.2. MECHANISM SECTION

Refer to the Service Manual for R4-Mechanism Chassis. (Order No. MKE0401000C1)

7. ADJUSTMENT PROCEDURES

7.1. SERVICE FIXTURES AND TOOLS



7.2. MECHANICAL ADJUSTMENT

Refer to the Service Manual for R4-Mechanism Chassis. (Order No. MKE0401000C1)

7.3. ELECTRICAL ADJUSTMENT

Note:

Following Adjustments have been preadjusted at factory and are not required.

- Purity Adjustment

- Convergence Adjustment

7.3.1. TEST EQUIPMENT

To do all of these electrical adjustments, the following equipment is required.

1. Dual-Trace Oscilloscope

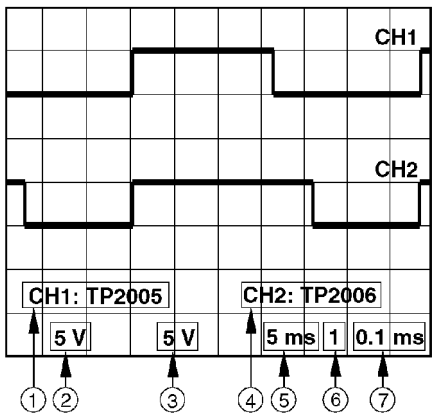
Voltage Range: 0.001 V to 50 V/Div.

Frequency Range: DC to 50 MHz
Probes: 10:1, 1:1

2. **NTSC Video Pattern Generator**
3. **DVM (Digital Volt Meter)**
4. **MTS/SAP Signal Generator**
   (TV Multi-Channel Sound Modulator (U.S.A.))
5. **Isolation Transformer (Variable)**
6. **VHS Alignment Tape (VFMS0003H6)**
7. **Degaussing Coil**
8. **White Pattern Generator**
9. **Audio Generator**

7.3.2. HOW TO READ THE ADJUSTMENT PROCEDURES

Fig. E1



1. Connecting Point
3. Volts/DIV
5. Time/DIV
7. Time/DIV for Delay

2. Volts/DIV
4. Connecting Point
6. Trigger Channel of the Scope
   1 : CH1
   2 : CH2

7.3.3. EVR (Electronic Variable Register) ADJUSTMENT WITH THE REMOTE CONTROL

This unit has electronic technology using I²C Bus concept.
The following control functions are adjusted by using "On Screen Displays" and the remote control instead of adjusting mechanical controls (VR).

Control functions	※1 Address	Range	Default
SUB COLOR	00	C0 - FF, 00 - 3F	00
SUB TINT	01	E0 - FF, 00 - 1F	00
SUB BRIGHT	02	C0 - FF, 00 - 3F	F0
CONTRAST	03	C1 - FF, 00	00
SUB SHARPNESS	04	E0 - FF, 00 - 1F	F0
R CUT -OFF	05	00 - 7F	1E
G CUT -OFF	06	00 - FD	3C
B CUT -OFF	07	00 - FD	3C
G DRIVE	08	00 - 7F	40
B DRIVE	09	00 - 7F	40
SUB CONTRAST	0A	00 - 0F	06
H-CENTER	0B	00 - 0F	08
V SIZE	0D	00 - 7F	40
V POSITION	0E	00 - 1F	02
ANR	10	00 - FD	85
PIC	11	00 - FD	42
VV COLOR	12	C0 - FF, 00 - 3F	05
VV TINT	13	E0 - FF, 00 - 1F	04
VV SHARPNESS	14	E0 - FF, 00 - 1F	FB
PG SHIFTER	15	00 - FD	80
US/CANADA	18	00 - 01	00/01

Bold-faced letters → Control functions which need to be adjusted.

Note:

※1 Address is not displayed on the TV screen.
Other Addresses except above are not used.

7.3.4. EVR ADJUSTMENT ITEM

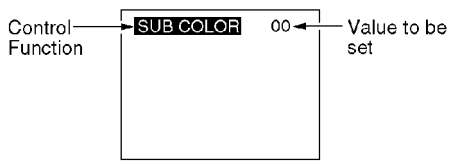
The following Items need to be adjusted for EVR adjustment.

- **SUB CONTRAST ADJUSTMENT**
- **FOCUS, SCREEN, CUT OFF, DRIVE ADJUSTMENT**
- **SUB COLOR/SUB TINT ADJUSTMENT**
- **DEFLECTION DISTORTION CORRECTION ADJUSTMENT**
- **WHITE BALANCE ADJUSTMENT**
- **SUB BRIGHTNESS ADJUSTMENT**

7.3.5. HOW TO ENTER EVR ADJUSTMENT MODE

Press and hold STOP/EJECT, PLAY/REPEAT and VOL- buttons of VCR operation panel on the unit together over 5 seconds with no cassette inserted.
The adjustment overlay will appear to Enter EVR adjustment mode.

Fig. E2-1



7.3.5.1. How to adjust:

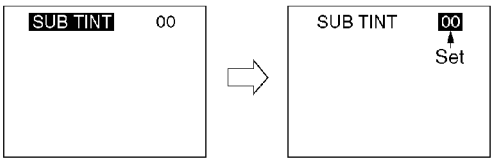
1. Press UP/DOWN ▲ ▼ key on the remote control to select control function to be adjusted.

Important Note:

Make a note of the original value of the controls before modifying in case the wrong control is adjusted.

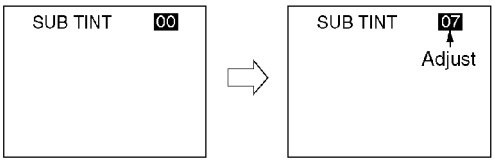
2. Press RIGHT/LEFT key on the remote control so that the shaded area moves to the value.

Fig. E2-2



3. Press UP/DOWN key on the remote control to adjust the value of the selected control.

Fig. E2-3

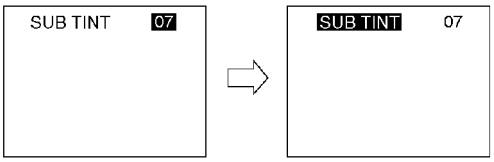


Note:

You can select a desired channel by using the numbered keys on the remote control in EVR adjustment mode.

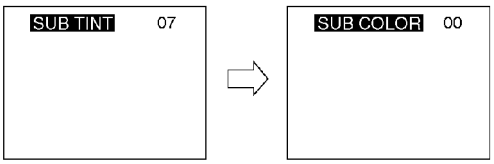
4. Press RIGHT/LEFT key on the remote control so that the shaded area moves to the control function.

Fig. E2-4



5. Press UP/DOWN key on the remote control to select a control function for the next adjustment if necessary.

Fig. E2-5



7.3.5.2. How to release from EVR Adjustment Mode:

Press and hold STOP/EJECT, PLAY/REPEAT and VOL- buttons of VCR operation panel on the unit together over 5 seconds again or press the POWER button OFF to release EVR adjustment mode. The adjusted value will be written to Memory IC(IC6004).

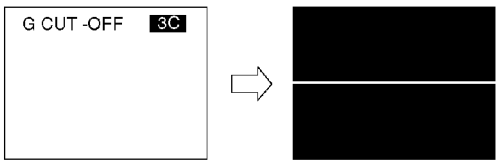
7.3.6. HOW TO ENTER SERVICE MODE

1. Set the unit to TV Mode.
2. Enter EVR adjustment mode.
3. Press DISPLAY key on the remote control for collapse scan.

Note:

Before pressing DISPLAY key on the remote control for collapse scan, select the desired control function and move the shaded area to the value for adjustments you will proceed.

Fig. E2-6



7.3.6.1. How to release from Service Mode:

Press DISPLAY key again on the remote control.

7.3.7. SUB CONTRAST ADJUSTMENT

Purpose:

To set the optimum sub contrast level.

Symptom of Misadjustment:

The picture is too dark or too light.

Test Point :

TP49 (CRT C.B.A.)

Adjustment :

SUB CONTRAST (EVR),

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Crosshatch Pattern Signal 1 V[p-p] (75 Ω terminated)

Mode :

STOP

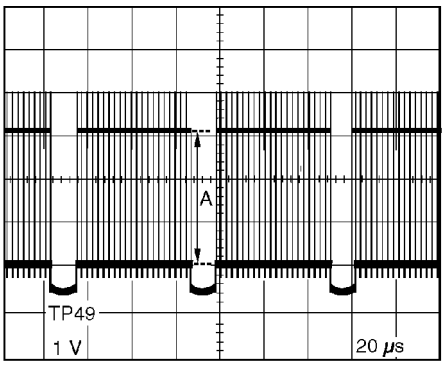
Equipment :

Oscilloscope,
NTSC Video Pattern Generator

1. Supply a Crosshatch Pattern Signal to the Video Input Jack.

2. Connect the Oscilloscope to TP49 on the CRT C.B.A.
   (Use TP47 for GND.)
3. Select SUB BRIGHT in EVR adjustment mode. Then, after making a note of the original value, adjust to the (C0).
4. Select SUB CONTRAST in EVR adjustment mode and adjust so that the level A is (3.0 V[p-p]±0.1 V[p-p]: For model with 20 inch CRT), or (3.15 V[p-p]±0.1 V[p-p]: For model with 27 inch CRT).
5. Select SUB BRIGHT in EVR adjustment mode and reset to the original value.

Fig. E3



7.3.8. FOCUS, SCREEN, CUT OFF, DRIVE ADJUSTMENT

Purpose:

To set the optimum Screen.

Symptom of Misadjustment:

The picture is will be an improper screen color mix.

Test Point :

TP50 (CRT C.B.A.)

Adjustment :

FOCUS CONTROL
(Flyback Transformer),
SCREEN CONTROL (Flyback Transformer),
SUB BRIGHT (EVR),
G DRIVE (EVR),
B DRIVE (EVR),
R CUT-OFF (EVR),
G CUT-OFF (EVR),

B CUT-OFF (EVR)

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Crosshatch Pattern Signal,
Monoscope Pattern Signal

Mode :

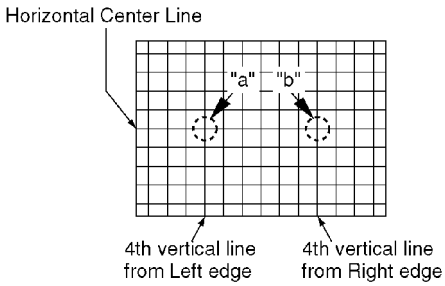
STOP

Equipment :

Oscilloscope,
NTSC Video Pattern Generator

1. **Supply a Crosshatch Pattern Signal to the Video Input Jack.**
2. **Adjust the FOCUS CONTROL on the Flyback Transformer so that the "a" and "b" are the sharpest.**

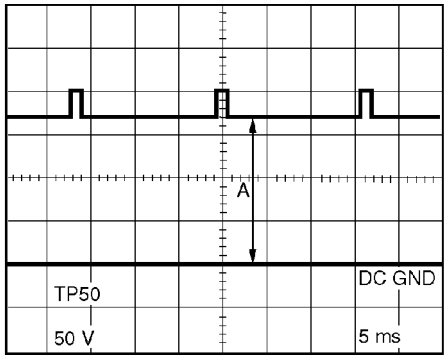
Fig. E4-1



3. **Supply a Monoscope Pattern Signal to the Video Input Jack.**
4. **Connect the Oscilloscope to TP50 on the CRT C.B.A. (Use TP47 for GND.)**
5. **Select SUB BRIGHT and move the shaded area to the value in EVR adjustment mode.**
6. **Turn the SCREEN CONTROL on the Flyback Transformer fully counterclockwise.**
7. **Press DISPLAY key on the remote control for collapse scan. (Refer to "HOW TO ENTER SERVICE MODE.")**
8. **Adjust SUB BRIGHT in EVR adjustment mode so that the level A is (170 VDC±5 VDC: For model with 20 inch CRT), or (185 VDC±5 VDC**

: For model with 27 inch CRT).

Fig. E4-2



9. Turn the SCREEN CONTROL on the Flyback Transformer clockwise carefully and stop at the point where any color is first observed.

10. In EVR adjustment mode, select the two colors not observed in step 8 from the following control functions (R CUT-OFF, G CUT-OFF, B CUT-OFF) and adjust so that the horizontal line becomes white.
For example, if the horizontal line appeared red in step 8, select and adjust the B CUT-OFF and G CUT-OFF. (See NOTE)

11. Press DISPLAY key on the remote control again to return for full frame scan.

12. Select SUB BRIGHT in EVR adjustment mode and adjust so that the picture has adequate brightness.

13. Select G DRIVE and B DRIVE in EVR adjustment mode and adjust so that the entire screen is white.

Note:

Before pressing DISPLAY key on the remote control for collapse scan, select the desired control function and move the shaded area to the value.

7.3.9. SUB COLOR / SUB TINT ADJUSTMENT

Purpose :

To set the standard color phase.

Symptom of Misadjustment :

Color phase will be shifted.

Test Point :

TP49 (CRT C.B.A.)

Adjustment :

SUB COLOR (EVR),
SUB TINT (EVR),

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Rainbow Color Bar

Mode :

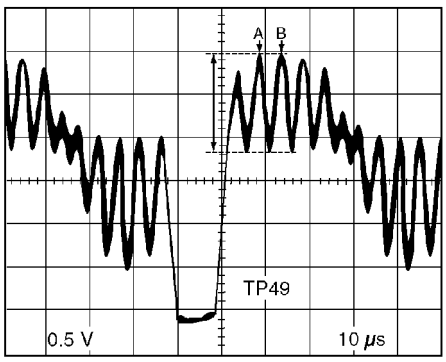
STOP

Equipment :

Oscilloscope,
NTSC Video Pattern Generator

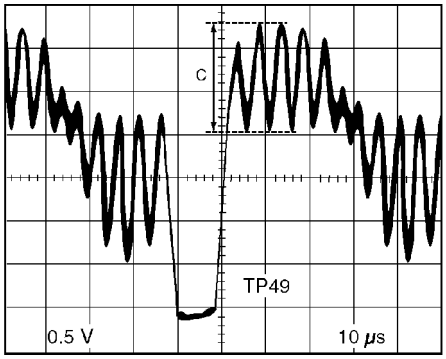
1. **Supply the Rainbow Color Bar signal to Video Input Jack.**
2. **Connect the Oscilloscope to TP49 on the CRT C.B.A.**
3. **Select SUB BRIGHT in EVR adjustment mode. Then, after making a note of original value, adjust to the (C0).**
4. **Select SUB TINT in EVR adjustment mode and adjust so that level A and B should be equal in amplitude.**

Fig. E5-1



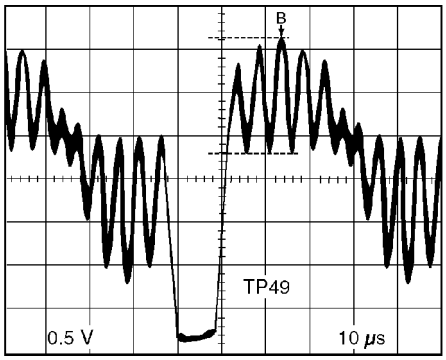
5. **Select SUB COLOR in EVR adjustment mode and adjust which higher level that level C is 1.5 V[p-p]±0.15 V[p-p].**

Fig. E5-2



6. Select SUB TINT in EVR adjustment mode and increase level B 1 clicks above the same level.

Fig. E5-3



7. Select SUB BRIGHT in EVR adjustment mode and reset to the original value.

7.3.10. DEFLECTION DISTORTION CORRECTION ADJUSTMENT

Purpose :

To set the optimum picture.

Symptom of Misadjustment :

The picture is distortion.

Test Point :

Adjustment :

V POSITION (EVR),
V SIZE (EVR),
H-CENTER (EVR),
(For model with Flat 27 inch CRT)
R763 (Deflection C.B.A.),
R753 (Deflection C.B.A.),
R766 (Deflection C.B.A.)

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Crosshatch Pattern Signal,
Monoscope Pattern Signal

Mode :

STOP

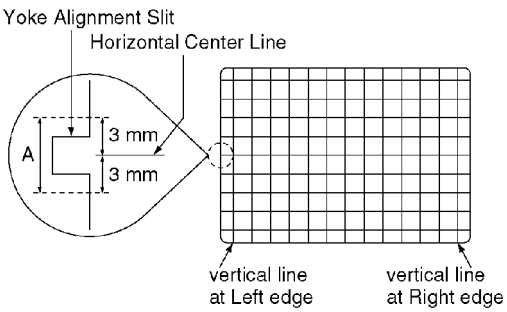
Equipment :

NTSC Video Pattern Generator

1. Supply a Crosshatch Pattern Signal to the Video Input Jack.

2. Confirm that the Horizontal Center Line is within the limits of A.

Fig. E6-1



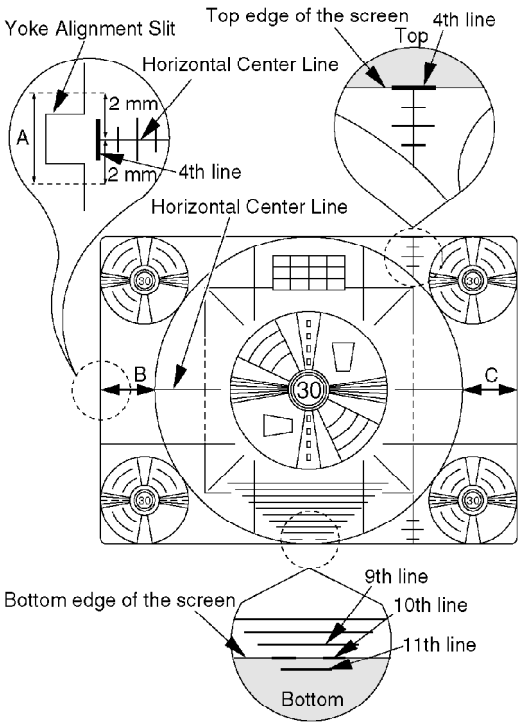
3. (For model with Flat 27 inch CRT)
Adjust R763 so that vertical lines should be almost straight.

4. (For model with Flat 27 inch CRT)
Adjust R753 so that vertical lines at Left edge and Right edge should be almost straight.

5. Supply a Monoscope Pattern Signal to the Video Input Jack.

6. Select V POSITION in EVR adjustment mode and adjust Horizontal Center Line is within the limits of A.

Fig. E6-2



7. Select V SIZE in EVR adjustment mode and adjust so that the top 4th line is just in view, and that the Bottom edge is between the 9th line and the 11th line.

8. Select H-CENTER in EVR adjustment menu and adjust so that B is approximately equal to width C.

9. (For model with Flat 27 inch CRT)
Adjust R766 so that the left 4th line is just in view.

10. Supply a Crosshatch Pattern Signal to the Video Input Jack. Then, confirm that the picture is no distortion.

7.3.11. WHITE BALANCE ADJUSTMENT

Purpose:

To set the standard white level for each color temperature.

Symptom of Misadjustment :

White becomes bluish or reddish.

Test Point :

TP50 (CRT C.B.A)

Adjustment :

FOCUS CONTROL

(Flyback Transformer),
SCREEN CONTROL (Flyback Transformer),
SUB BRIGHT (EVR),
G DRIVE (EVR),
B DRIVE (EVR),
R CUT-OFF (EVR),
G CUT-OFF (EVR),
B CUT-OFF (EVR)

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Monoscope Pattern Signal,
White Pattern Signal

Mode :

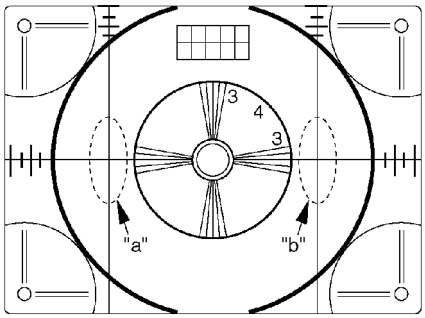
STOP

Equipment :

NTSC Video Pattern Generator,
White Pattern Generator,
Oscilloscope

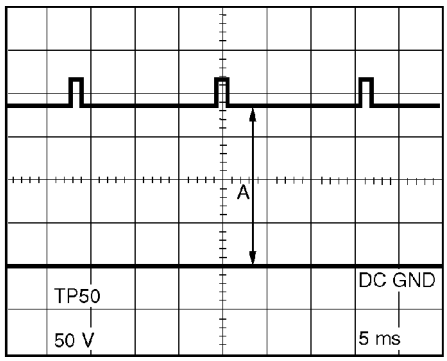
1. **Supply a Monoscope Pattern Signal to the Video Input Jack.**
2. **Connect the Oscilloscope to TP50 on the CRT C.B.A. (Use TP47 for GND.)**
3. **Select SUB BRIGHT and move the shaded area to the value in EVR adjustment mode.**
4. **Adjust the FOCUS CONTROL on the Flyback Transformer so that the "a" and "b" are the sharpest.**

Fig. E7-1



5. Turn the SCREEN CONTROL on Flyback Transformer fully counterclockwise.
6. Press DISPLAY key on the remote control for collapse scan. (Refer to "HOW TO ENTER SERVICE MODE.")
7. Adjust SUB BRIGHT in EVR adjustment mode so that the level A is 175 VDC±5 VDC.

Fig. E7-2



8. Turn the SCREEN CONTROL on the Flyback Transformer clockwise carefully and stop at the point where red or blue is first observed.
9. In EVR adjustment mode, select the two colors not observed in step 8 from the following control functions (R CUT-OFF, G CUT-OFF, B CUT-OFF) and adjust so that the horizontal line becomes white.
   For example, if the horizontal line appeared red in step 8, select and adjust the B CUT-OFF and G CUT-OFF (See Note).
10. Supply a White Pattern Signal to the Video Input Jack.
11. Press DISPLAY key on the remote control again to return for full frame scan.
12. Select G DRIVE and B DRIVE in EVR adjustment mode and adjust

so that the entire screen is white.

13. Confirm that the screen is tracking the White Pattern properly. If NG, repeat the above steps 8, 9 and 12 until the screen is properly tracking the White Pattern.

14. Select SUB BRIGHT in EVR adjustment mode and adjust correctly.

Note:

Before pressing DISPLAY key on the remote control for collapse scan, select the desired control function and move the shaded area to the value.

7.3.12. SUB BRIGHTNESS ADJUSTMENT

Note:

Perform this adjustment in a darkened room.

Purpose :

To set the optimum brightness level.

Symptom of Misadjustment :

The picture is too white or too black.

Test Point :

Adjustment :

SUB BRIGHT (EVR),

Specification :

Refer to descriptions below.

Input :

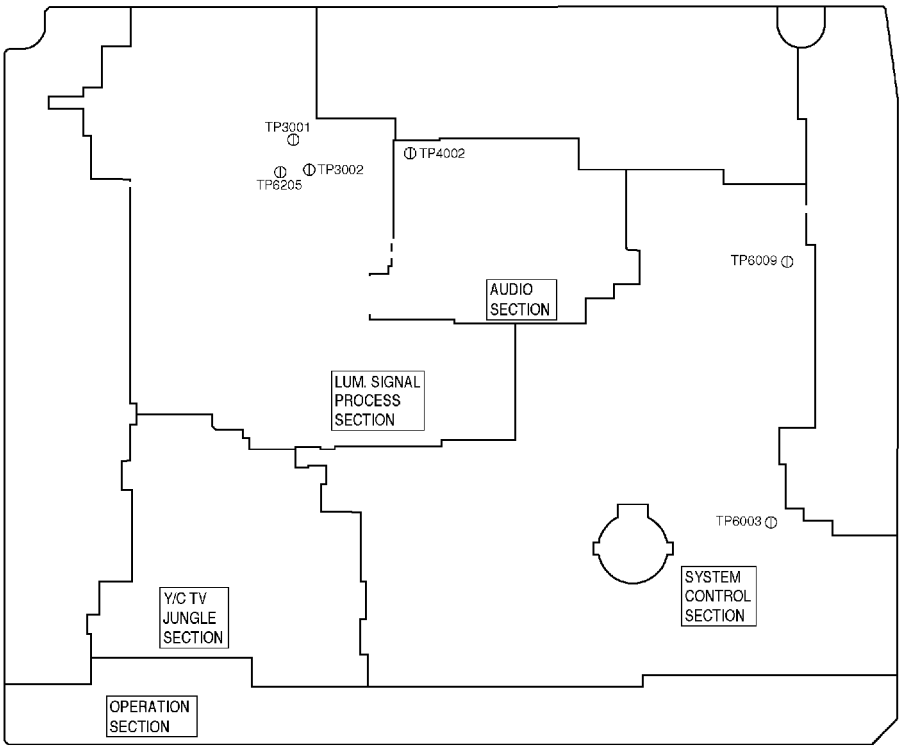
Mode :

STOP

1. Do not input any signal to the unit.
2. Set INPUT SELECT item to LINE in SET UP TV menu to display black screen.
3. Select SUB BRIGHT in EVR adjustment mode, and adjust so that the black screen starts to turn gray (lighting only).

7.4. TEST POINTS AND CONTROL LOCATION

Main C.B.A.



(Component Side)

FUNCTION OF IMPORTANT TEST POINTS	
TP3001	Video Signal
TP3002	REC/PB Video envelope signal
TP4002	Normal Audio signal
TP6003	Defeat Auto tracking function (connect to +5V(TP6009))
TP6009	+5V
TP6205	Head SW.

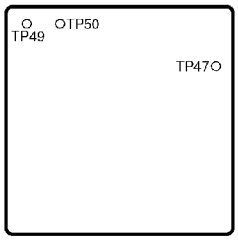
Test Point Information

● Test Point with a Test Pin.

⦶ Test Point with a jumper wire across a hole in the P.C.B.

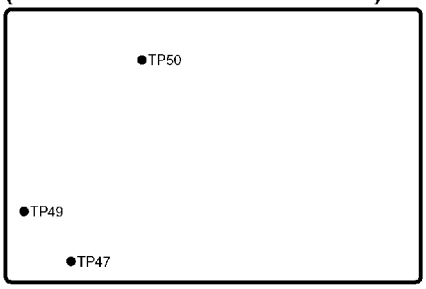
○ Test Point with no Test Pin.

CRT C.B.A.



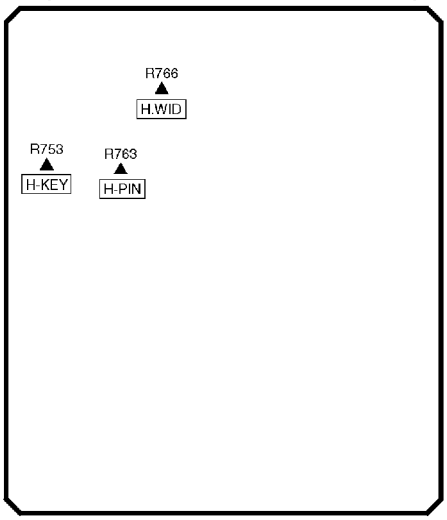
(Foil Side)

CRT C.B.A.
(For model with Flat 27 inch CRT)



(Foil Side)

Deflection C.B.A.
(For model with Flat 27 inch CRT)



(Foil Side)

8. SCHEMATIC DIAGRAMS

8.1. SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES

8.2. MAIN SCHEMATIC DIAGRAMS

8.3. AUDIO SCHEMATIC DIAGRAMS

8.4. HI-FI AUDIO / VIDEO HEAD AMP SCHEMATIC DIAGRAM

8.5. TV MAIN SCHEMATIC DIAGRAMS

8.6. DEFLECTION SCHEMATIC DIAGRAM (Models:PV-DF274 / PV-DF2704 / PV-DF2704-K)

8.7. POWER SUPPLY SCHEMATIC DIAGRAMS

8.8. OPERATION SCHEMATIC DIAGRAM

8.9. CRT SCHEMATIC DIAGRAM (Models:PV-DF204 / PV-DF2004 / PV-DF2004-K)

8.10. CRT SCHEMATIC DIAGRAM (Models:PV-DF274 / PV-DF2704 / PV-DF2704-K)

8.11. DVD MAIN / DVD SUB SCHEMATIC DIAGRAMS

8.12. INTERCONNECTION SCHEMATIC DIAGRAM

8.13. VOLTAGE CHART

9. CIRCUIT BOARD LAYOUT

9.1. MAIN C.B.A.

9.2. AUDIO / OPERATION C.B.A.

9.3. TV MAIN C.B.A.

9.4. POWER SUPPLY C.B.A.

9.5. HI-FI AUDIO / VIDEO HEAD AMP / DEFLECTION / CRT C.B.A.

9.6. DVD MAIN / DVD SUB C.B.A.

10. BLOCK DIAGRAMS

11. EXPLODED VIEWS

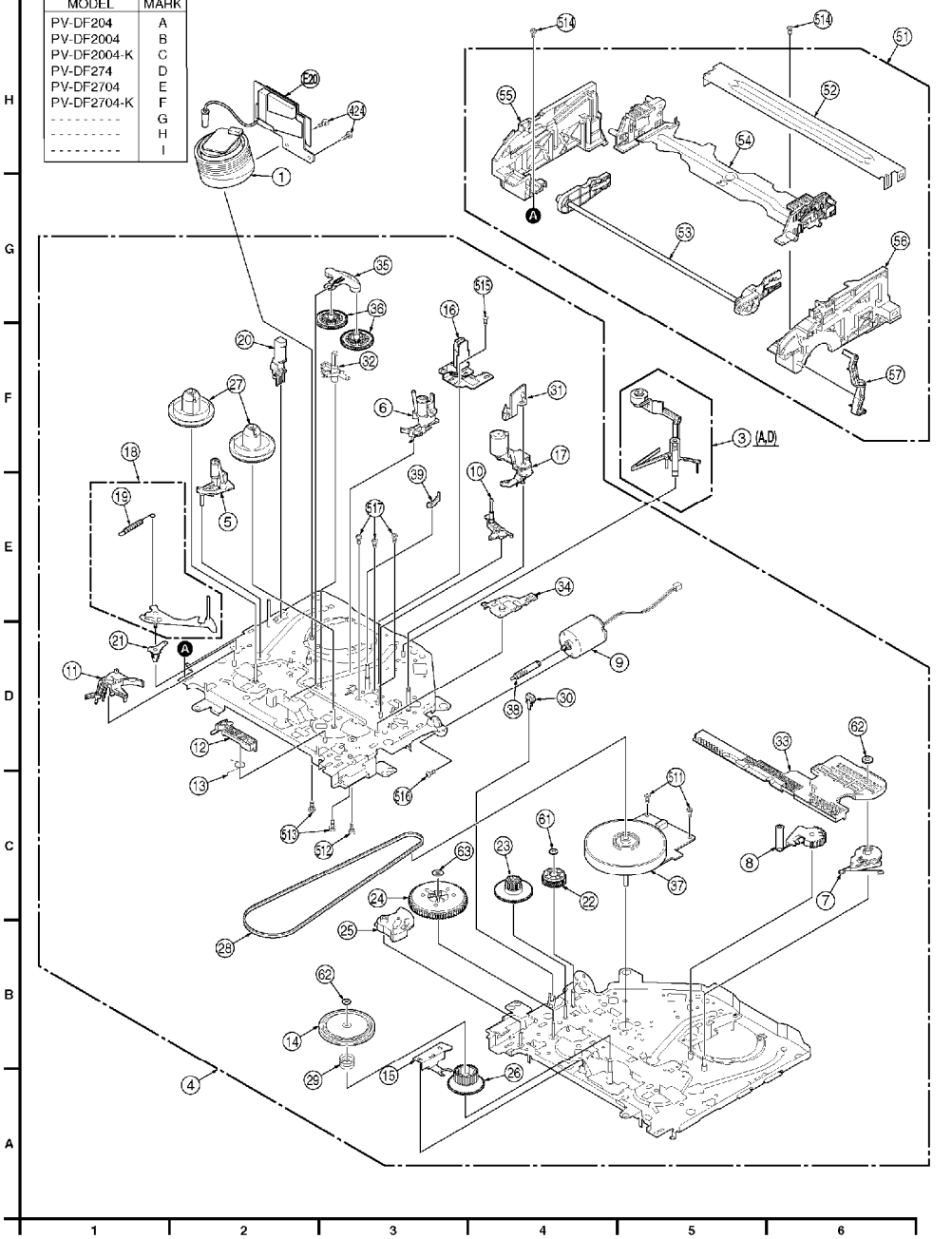
11.1. MECHANISM SECTION

❶ MECHANISM SECTION

COMPARISON CHART
OF MODELS & MARKS

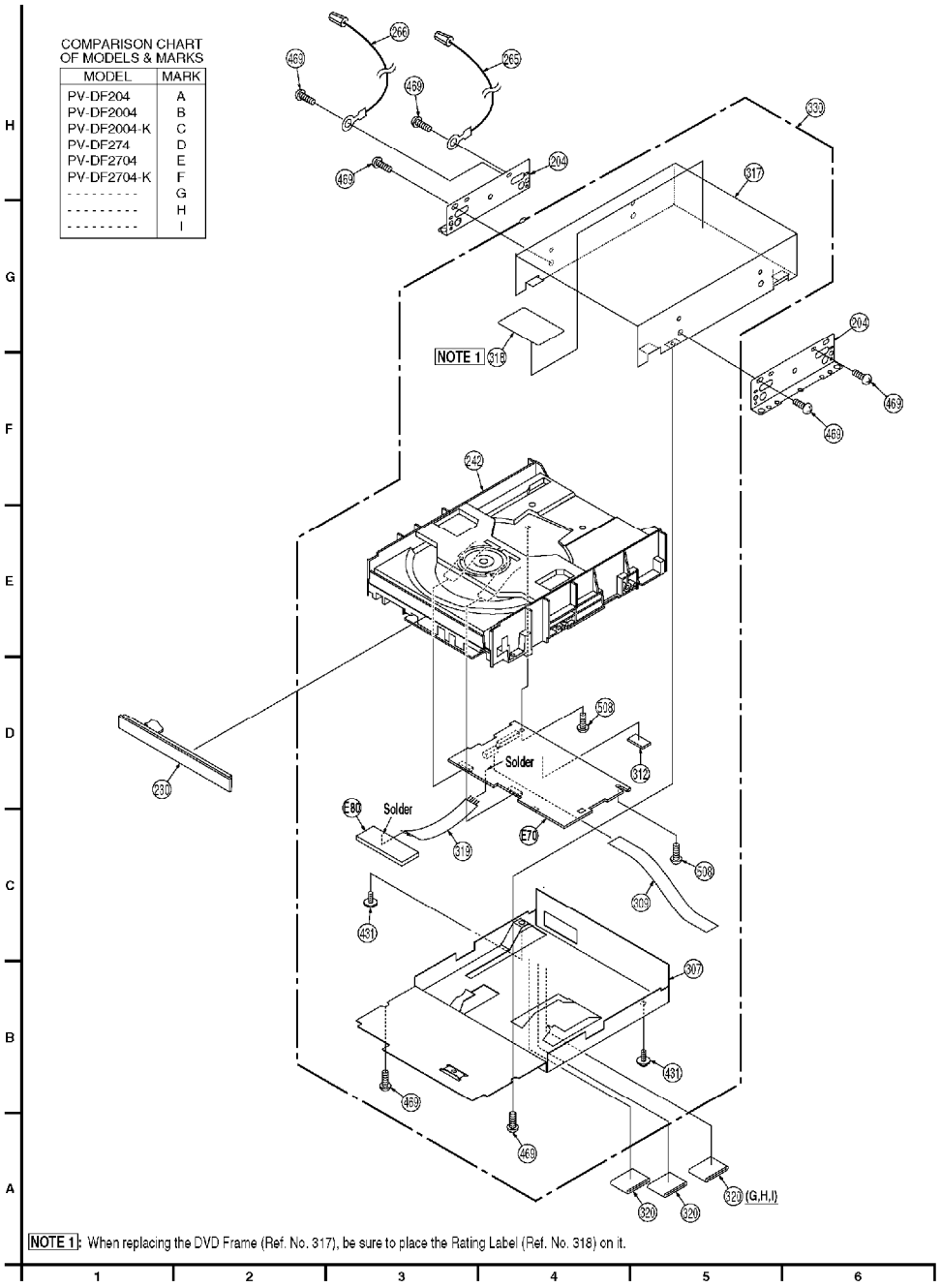
MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - - - - - -	G
- - - - - - - - -	H
- - - - - - - - -	I

Note: Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied.
And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.



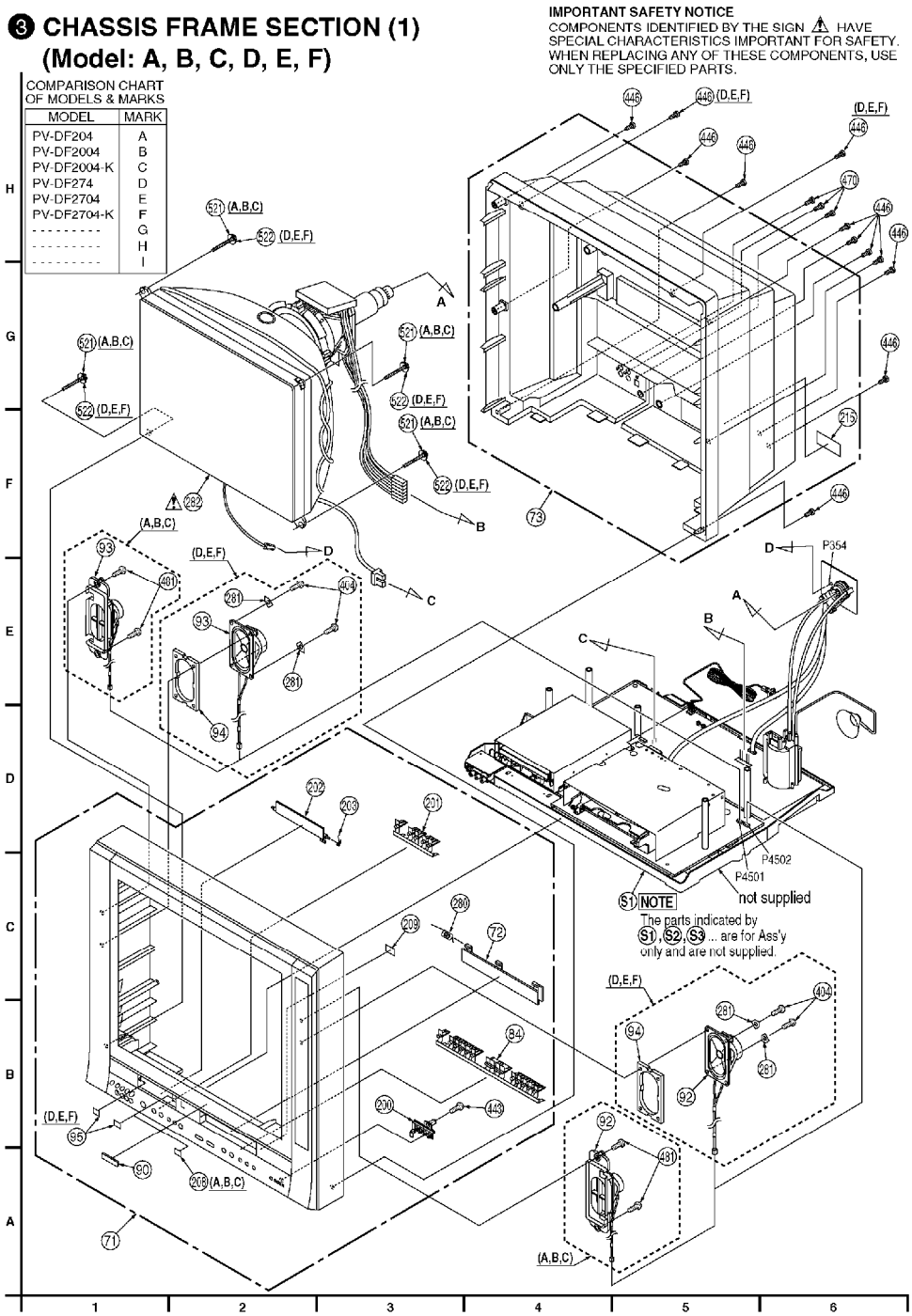
11.2. DVD SECTION

❷ DVD SECTION


COMPARISON CHART
OF MODELS & MARKS
MODEL | MARK
PV-DF204 | A
PV-DF2004 | B
PV-DF2004-K | C
PV-DF274 | D
PV-DF2704 | E
PV-DF2704-K | F
- - - - - - - - - | G
- - - - - - - - - | H
- - - - - - - - - | I
NOTE 1
Solder
Solder
(G,H,I)
NOTE 1: When replacing the DVD Frame (Ref. No. 317), be sure to place the Rating Label (Ref. No. 318) on it.

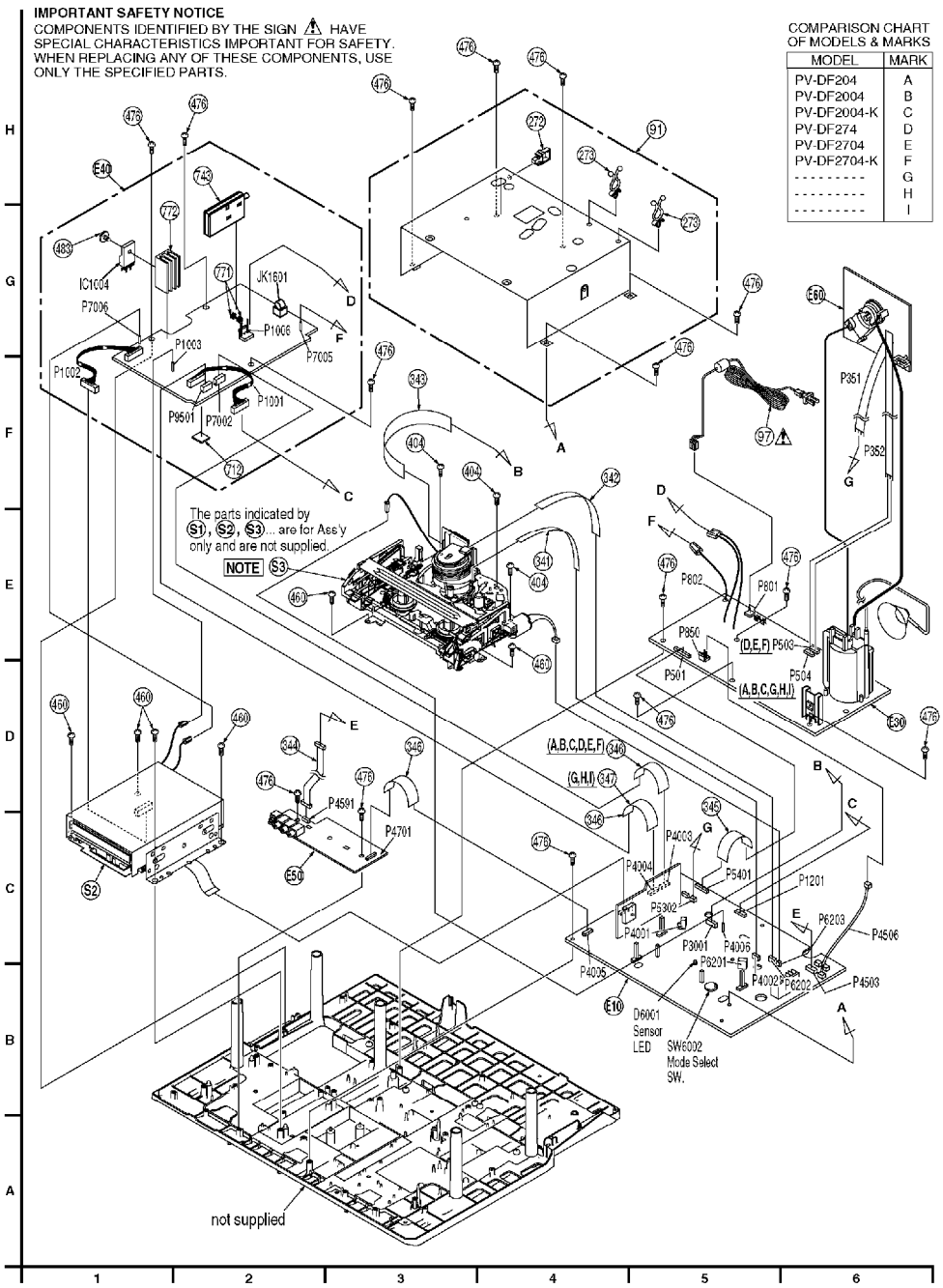
11.3. CHASSIS FRAME SECTION (1)

(Model: A, B, C, D, E, F)


❸ CHASSIS FRAME SECTION (1)
(Model: A, B, C, D, E, F)
IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.
COMPARISON CHART OF MODELS & MARKS
MODEL | MARK
PV-DF204 | A
PV-DF2004 | B
PV-DF2004-K | C
PV-DF274 | D
PV-DF2704 | E
PV-DF2704-K | F
G
H
I
NOTE
The parts indicated by S1, S2, S3 ... are for Ass'y only and are not supplied.
not supplied
P354
P4501
P4502

11.4. CHASSIS FRAME SECTION (2)

❹ CHASSIS FRAME SECTION (2)



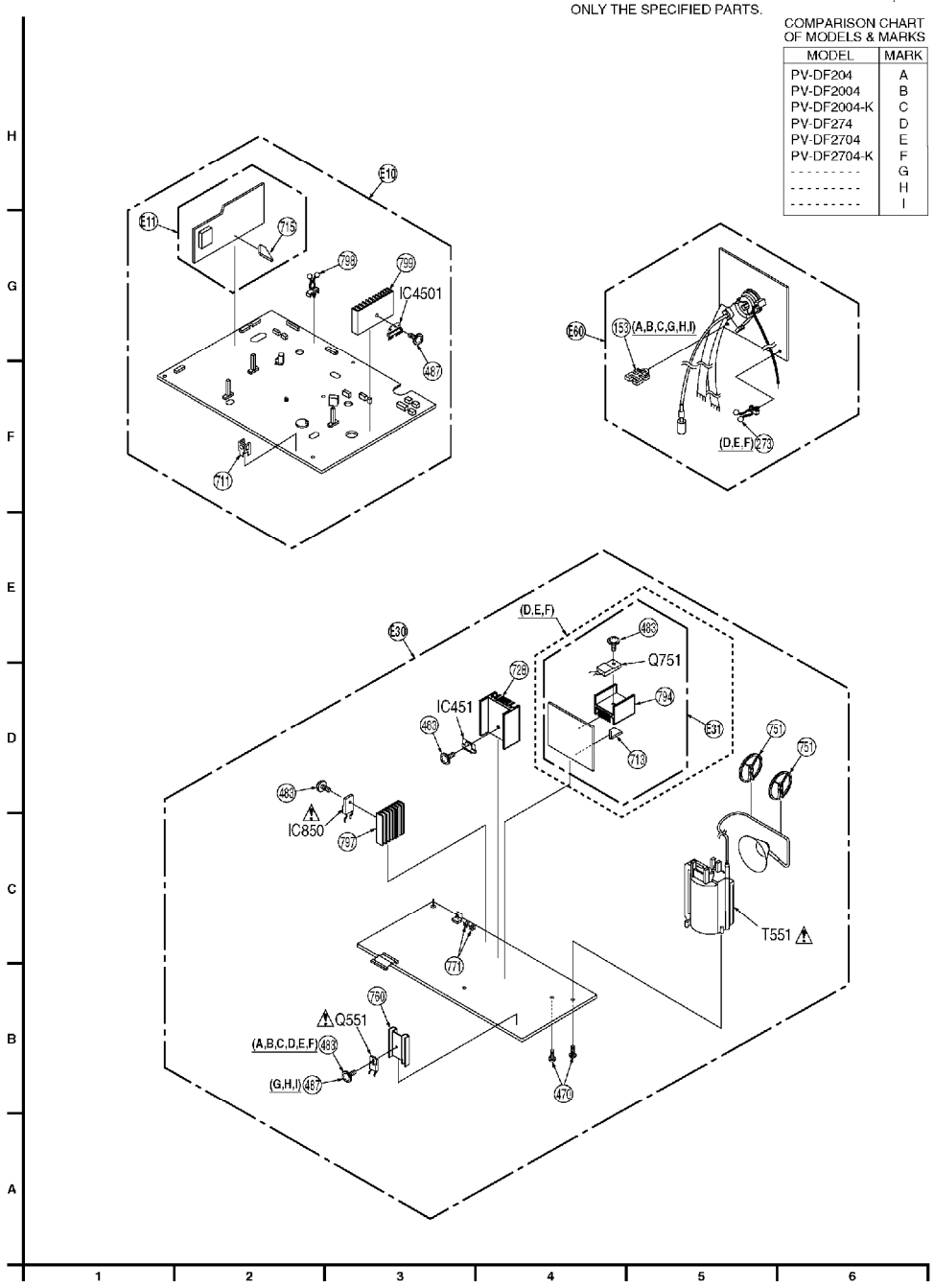
11.5. CHASSIS FRAME SECTION (3)

❺ CHASSIS FRAME SECTION (3)

IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

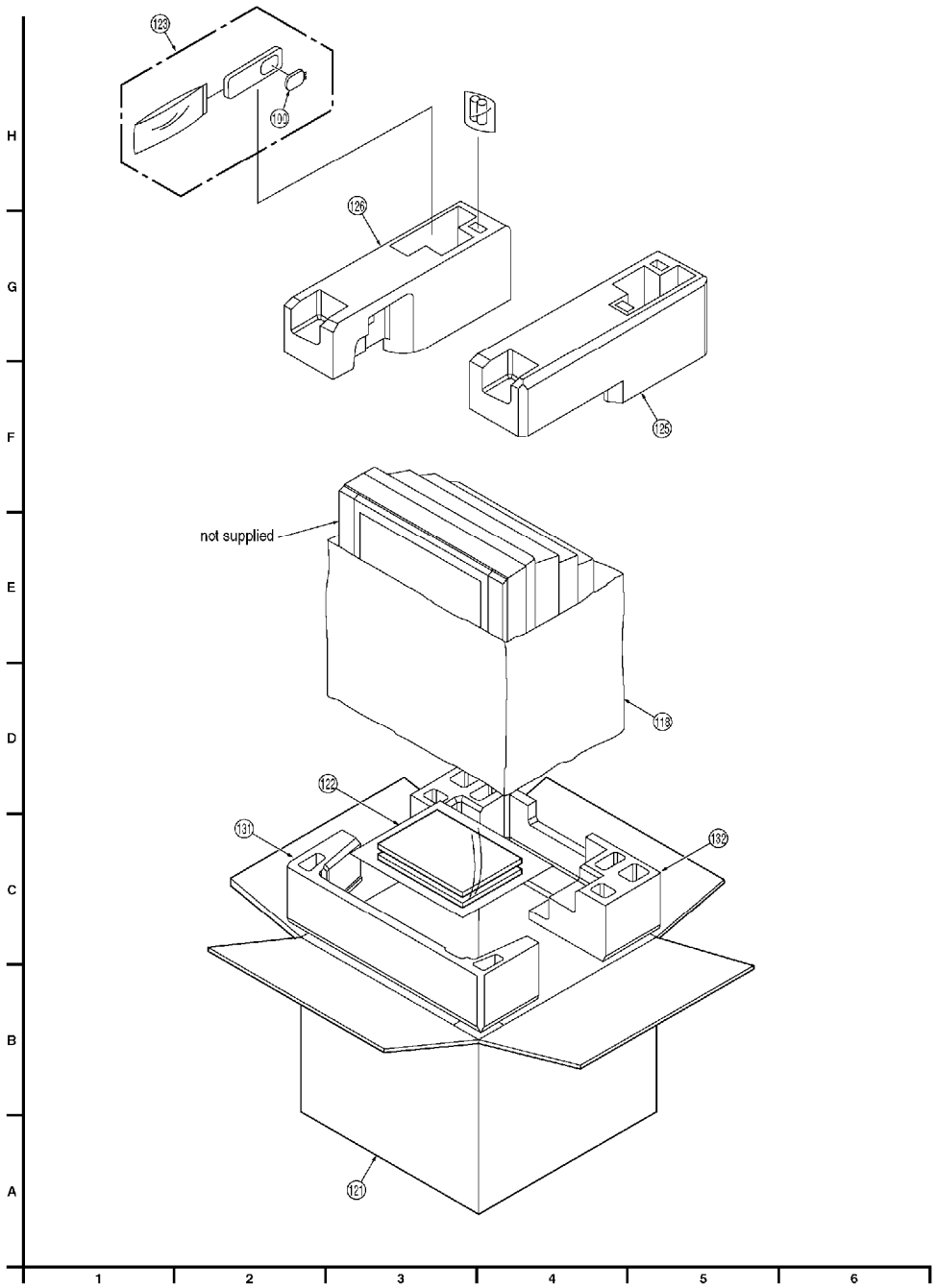
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - - - - - -	G
- - - - - - - - -	H
- - - - - - - - -	I



11.6. PACKING PARTS AND ACCESORIES SECTION

❻ PACKING PARTS AND ACCESORIES SECTION



12. REPLACEMENT PARTS LISTS

BEFORE REPLACING PARTS, READ THE FOLLOWING:

12.1. REPLACEMENT NOTES

12.1.1. General Notes

1. Use only original replacement parts:

To maintain original function and reliability of repaired units, use

only original replacement parts which are listed with their part numbers in the parts list.

2. **IMPORTANT SAFETY NOTICE**
   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components, use only the specified parts.
3. **SPECIAL NOTE**
   All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.
4. **Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.**
5. **Parts different in shape or size may be used. However, only interchangeable parts will be supplied as service replacement parts.**
6. **Definition of Parts supplier:**
   A. Parts with mark "MKE" in the Remarks column are supplied from MKE.
   B. Parts with mark "MKI" in the Remarks column are supplied from MKI.
   C. Parts with mark "SPC" in the Remarks column are supplied from Spare Parts Center of Panasonic AVC Company.
   D. Parts without mark in the Remarks column are supplied from MKA.
7. **Item numbers with capital letter E (Example: E10, E20,...) in the Ref. No. column are shown in the exploded views.**
8. **Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.**

12.1.2. Mechanical Replacement Notes

1. **Section No. of parts shown in Exploded Views are indicated in the Remarks column.**

2. **The Mechanical Chassis Sub Ass'y (Ref. No. 4) consists of all the mechanical parts except the Cylinder Unit (Ref. No. 1), and the Cassette Up Ass'y (Ref. No. 51) and Cleaner Arm Unit (Ref. No.3). After replacing the Mechanical Chassis Sub Ass'y, be sure to perform "TAPE INTERCHANGEABILITY ADJUSTMENT" in Service Manual for R4-Mechanism - Chassis - for - PV-Model (Order No. MKE0401000C1).**
3. **The Infrared Remote Control Unit (Ref. No. 123) replacement part is available as a complete assembly unit only. Do not try to disassemble the Infrared Remote Control Unit. However, the battery cover is available separately as a replacement part.**
4. **When replacing the DVD Frame (Ref. No. 317), be sure to place the Rating Label (Ref. No. 318) on it.**
5. **When replacing the DVD Mechanism Unit (Ref. No. 242) or the DVD Frame (Ref. No. 317), be sure to place the Cabinet Label (Ref. No. 253) on it.**

12.1.3. Electrical Replacement Notes

1. **Unless otherwise specified;**
   All resistors are in Ω, K = 1,000 Ω, M = 1,000 kΩ.
2. **Abbreviation**

RTL:
Retention Time Limited
This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.

NR:
Non Repairable Board Ass'y

MGF CHIP:
Metal Glaze Film Chip

C CHIP:
Ceramic Chip

COMPLX CMP:
Complex Component

W FLMPRF:
Wirewound Flameproof

C.B.A.:
Circuit Board Assembly

P.C.B.:
Printed Circuit Board

E.S.D.:
Electrostatically Sensitive Devices

3. When replacing 0 Ω resistor, a wire can be substituted for it.

4. Since the UHF/VHF TUNER/TV DEMODULATOR UNIT (Ref. No. 743) has already been pre-adjusted at the factory, do not try to adjust the UHF/VHF TUNER/TV DEMODULATOR UNIT. The UHF/ VHF TUNER/TV DEMODULATORUNIT replacement part is available as a complete assembly unit only.

5. EEP ROM IC (IC6004) replacement note:
There are 2 types of EEPROM IC (IC6004) used on the Main C.B.A. (DIP TYPE and SOP TYPE). However, these are same reliability, please refer to "MAIN C.B.A." in CIRCUIT BOARD LAYOUT.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
---------	G
---------	H
---------	I

12.2. MECHANICAL REPLACEMENT PARTS LIST

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
---------	G
---------	H
---------	I

Definition of Parts supplier:

1. **Parts with mark "MKE" in the Remarks column are supplied from MKE.**
2. **Parts with mark "MKI" in the Remarks column are supplied from MKI.**
3. **Parts with mark "SPC" in the Remarks column are supplied from Spare Parts Center of Panasonic AVC Company.**
4. **Parts without mark in the Remarks column are supplied from MKA.**

MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
1	LSEG0121	CYLINDER UNIT	1
3	VXL3131	CLEANER ARM UNIT (A,D)	1
4	LSXY0606	MECHANICAL CHASSIS SUB ASS'Y (A,D)	1 RTL
4	LSXY0543	MECHANICAL CHASSIS SUB ASS'Y (B,C,E,F)	1 RTL
5	VXA7105	SUPPLY SHAFT HOLDER UNIT	1
6	VXA7106	TAKE UP SHAFT HOLDER UNIT	1
7	VXL3107	SUPPLY LOADING ARM UNIT	1
8	VXL3108	TAKE UP LOADING ARM UNIT	1
9	VEM0796	LOADING MOTOR UNIT	1
10	VXL3110	P5 ARM UNIT	1
11	VXL3112	SUPPLY BRAKE ARM UNIT	1
12	VXL3121	TAKE UP BRAKE ARM UNIT	1
13	VMB3548	TAKE UP BRAKE SPRING	1
14	VXP2133	CENTER CLUTH UNIT	1
15	VXL3124	CHANGING LEVER UNIT	1
16	LSEH0012	AC HEAD UNIT	1
17	VXL3109	PINCH ARM UNIT	1
18	VXL3111	TENSION ARM UNIT	1
19	VMB3547	TENSION SPRING	1
20	L1AG00000011	FE HEAD	1
21	VDB1431	TENSION ARM BOSH	1
22	VXP2168	TORQUE CLUTCH UNIT	1
23	VDG1510	INTERMEDIATE GEAR	1
24	VDG1511	MAIN CAM GEAR	1
25	VXA7311	SECTOR GEAR UNIT	1
26	VDG1514	CHANGE GEAR	1

Ref. No.	Part No.	Part Name & Description	Remarks
27	VDR0372	REEL TABLE	1
28	VDV0391	CAPSTAN BELT	1
29	VMB3550	CHANGING GEAR SPRING	1
30	VMD4987	WORM BEARING	1
31	VMD4252	OPENER PIECE	1
32	VMD4253	LED PRISM	1
33	VML3624	MAIN LEVER	1
34	VML3626	PINCH CHARGE ARM	1
35	VML3632	IDLER ARM	1
36	VDG1512	IDLER GEAR	1
37	VEM0800	CAPSTAN ASS'Y	1
38	VDG1637	WORM GEAR	1
39	VMX3377	P4 CAP	1
51	LSXY0541	CASSETTE UP ASS'Y	1
52	VMA0L25	TOP PLATE	1
53	VXL3160	MAIN SHAFT UNIT	1
54	VXA7110	CASSETTE HOLDER UNIT	1
55	VMD4255	SIDE PLATE L	1
56	VMD4985	SIDE PLATE R	1
57	LSML0367	OPENER LEVER 2	1
61	VMX2208	CUT WASHER,STEEL	1
62	VMX3196	CUT WASHER,STEEL	1
63	VMX2699	CUT WASHER	1
71	LSYY0113	FRONT CABINET ASS'Y (A)	3
71	LSYY0066	FRONT CABINET ASS'Y (B,C)	3
71	LSYY0108	FRONT CABINET ASS'Y (D)	3
71	LSYY0052	FRONT CABINET ASS'Y (E,F)	3
72	LSYY0116	CASSETTE DOOR-LID UNIT (A)	3
72	LSYY0073	CASSETTE DOOR-LID UNIT (B,C)	3
72	LSYY0110	CASSETTE DOOR-LID UNIT (D)	3
72	LSYY0067	CASSETTE DOOR-LID UNIT (E,F)	3
73	LSYY0068	REAR COVER UNIT (A,B)	3
73	LSYY0126	REAR COVER UNIT (C)	3
73	LSYY0055	REAR COVER UNIT (D,E)	3
73	LSYY0129	REAR COVER UNIT (F)	3
84	LSGU0617	OPERATION BUTTON A (A)	3
84	LSGU0604	OPERATION BUTTON A (B,C)	3
84	LSGU0615	OPERATION BUTTON A (D)	3
84	LSGU0602	OPERATION BUTTON A (E,F)	3
90	TBMA003	BADGE,ABS RESIN (A,B,C)	3
90	TBMA008	BADGE,ABS RESIN (D,E,F)	3
91	LSXA0566	TOP SHIELD PLATE ASS'Y (A,B,C)	4
91	LSXA0565	TOP SHIELD PLATE ASS'Y (D,E,F)	4
92	LXQAS8270RU	SPEAKER UNIT (A,B,C)	4
92	LXQAS8275F	SPEAKER UNIT (D,E,F)	3
93	LXQAS7270LU	SPEAKER UNIT (A,B,C)	3
93	LXQAS6275F	SPEAKER UNIT (D,E,F)	3
94	LSMG0145	SPEAKER CUSHION (D,E,F)	3
95	LSMF0325	SPACER (D,E,F)	3
97	LSJA03492017	AC CORD W/PLUG,120V	4 ⚠
100	EUR77EC2406A	BATTERY COVER	6
118	LSPF0054	BAG,POLYETHYLENE	6
121	LSPG1682	PACKING CASE,PAPER (A)	6
121	LSPG1651	PACKING CASE,PAPER (B,C)	6

Ref. No.	Part No.	Part Name & Description	Remarks
121	LSPG1707	PACKING CASE,PAPER (D)	6
121	LSPG1650	PACKING CASE,PAPER (E,F)	6
122	LSQF0798	FAN BAG (A,D)	6
122	LSQF0776	FAN BAG (B,E)	6
122	LSQF0812	FAN BAG (C,F)	6
123	EUR7724030	INFRARED REMOTE CONTROL UNIT (A,D)	6
123	EUR7724020	INFRARED REMOTE CONTROL UNIT (B,C,E,F)	6
125	LSPN0425	TOP CUSHION RIGHT,STYROFOAM (A,B,C)	6
125	LSPN0434	TOP CUSHION RIGHT,STYROFOAM (D,E,F)	6
126	LSPN0424	TOP CUSHION LEFT,STYROFOAM (A,B,C)	6
126	LSPN0433	TOP CUSHION LEFT,STYROFOAM (D,E,F)	6
131	LSPN0426	BOTTOM CUSHION FRONT,STYROFOAM (A,B,C)	6
131	LSPN0435	BOTTOM CUSHION FRONT,STYROFOAM (D,E,F)	6
132	LSPN0427	BOTTOM CUSHION REAR,STYROFOAM (A,B,C)	6
132	LSPN0436	BOTTOM CUSHION REAR,STYROFOAM (D,E,F)	6
153	TMM7443-1	CLAMPER (A,B,C)	5
200	LSGL0341	PANEL LIGHT (A,B,C)	3
200	LSGL0411	PANEL LIGHT (D,E,F)	3
201	LSGU0618	OPERATION BUTTON B (A)	3
201	LSGU0605	OPERATION BUTTON B (B,C)	3
201	LSGU0616	OPERATION BUTTON B (D)	3
201	LSGU0603	OPERATION BUTTON B (E,F)	3
202	LSYY0117	DVD DISK DOOR-LID UNIT (A)	3
202	LSYY0087	DVD DISK DOOR-LID UNIT (B,C)	3
202	LSKF0564	DVD DISK DOOR-LID UNIT (D)	3
202	LSKF0550	DVD DISK DOOR-LID UNIT (E,F)	3
203	LSMB0170	DVD CASSETTE DOOR SPRING	3
204	LSMA0731	DVD MOUNT ANGLE	2
208	TMK77708	CUSHION,RUBBER (A,B,C)	3
209	VMFS0213	SHEET,NYLON+RAYON	3
215	LSQL1623	DOLBY & DTS CAUTION LABEL	3
230	LSGP0381	TRAY COVER	2
242	LSXK0165	DVD MECHANISM UNIT	2 MKI
265	VEKS9427	CONNECTOR CABLE W/PLUG	2
266	VEKS5797	CONNECTOR CABLE W/PLUG	2
272	TMM77412	CLAMPER	4
273	TMM7464-1	CLAMPER	3,5
280	LSMB0125	CASSETTE DOOR SPRING (A,D)	3
280	LSMB0289	CASSETTE DOOR SPRING (B,C)	3
280	LSMB0221	CASSETTE DOOR SPRING (E,F)	3
281	LSMF0330	SPEAKER SPACER (D,E,F)	3
282	LSEQ0725	COLOR PICTURE TUBE UNIT (A,B,C)	3 ⚠
282	LSEQ0729	COLOR PICTURE TUBE UNIT (D,E,F)	3 ⚠
307	LSMA0717	SHIELD CASE A	2 MKI
309	LSJW0068	FLEXIBLE FLAT CABLE W/OUT PLUG	2 MKI
312	LMMY0030	HEAT SHEET,SI	2 MKI
317	LMMK0201	FRAME	2 MKI
318	LSQL1590	RATING LABEL	2 MKI
319	LSJW0029	FLEXIBLE FLAT CABLE W/OUT PLUG	2 MKI
320	J0KD00000084	FERRITE CORE	2
330	LSXK0140	DVD BLOCK UNIT	2 MKI
341	LSJW0060	FLEXIBLE FLAT CABLE W/OUT PLUG	4
342	LSJW0061	FLEXIBLE FLAT CABLE W/OUT PLUG	4

Ref. No.	Part No.	Part Name & Description	Remarks
343	LSJW0050	FLEXIBLE FLAT CABLE W/OUT PLUG	4
344	VEKS5899	CONNECTOR CABLE W/PLUG	4
345	LSJW0062	FLEXIBLE FLAT CABLE W/OUT PLUG	4
346	LSJW0063	FLEXIBLE FLAT CABLE W/OUT PLUG	4
404	VHDS0472	SCREW,STEEL	3,4
424	XYC26+SF6J	SCREW W/WASHER,STEEL	1
431	XTV26+6F	TAPPING SCREW,STEEL	2 MKI
443	XTV4+12A	TAPPING SCREW,STEEL	3
446	XTV4+16A	TAPPING SCREW,STEEL	3
460	XTN4+12A	TAPPING SCREW,STEEL	4
469	XSN3+6	SCREW,STEEL	2
470	XTV3+10G	TAPPING SCREW,STEEL	3,5
476	XTV3+12G	TAPPING SCREW,STEEL	4
481	XTW4+Z15D	TAPPING SCREW,STEEL (A,B,C)	3
483	XYN3+F10S	SCREW W/WASHER,STEEL	4,5
487	XYN3+J8	SCREW W/WASHER,STEEL	5
508	XTV26+6J	TAPPING SCREW,STEEL	2 MKI
511	XTV26+5F	TAPPING SCREW,STEEL	1
512	VHD1095	SCREW,STEEL	1
513	VHD1117	SCREW,STEEL	1
514	XTV26+8FR	TAPPING SCREW,STEEL	1
515	VHD1044	SCREW,STEEL	1
516	XYN3+C4	SCREW W/WASHER,STEEL	1
517	XTN26+7J	SCREW,STEEL	1
521	LHT60002Y	SCREW,STEEL (A,B,C)	3
522	LHT60003Y	SCREW,STEEL (D,E,F)	3
711	PNA4611M00HC	INFRARED RECEIVER UNIT	5
712	VMTS0035	CUSHION,RUBBER	4
713	VMAS1912	P.C.B. SUPPORT ANGLE (D,E,F)	5
715	LUL23004A	METAL PLATE,STEEL	5
728	LUS63008A	HEAT SINK (A,B,C)	5
728	LSSC0254	HEAT SINK (D,E,F)	5
743	J3AAABB00001	TUNER,UHF/VHF NR	4
751	LML69001A	ANODE LEAD CLAMPER	5
760	TUC77628	HEAT SINK	5
771	EYF52BC	FUSE HOLDER	4,5
772	LSSC0680	HEAT SINK	4
794	TUC15776	HEAT SINK PLATE (D,E,F)	5
797	LSSC0529	HEAT SINK (A,B,C)	5
797	LSSC0562	HEAT SINK (D,E,F)	5
798	TMM7464-1R	CLAMPER	5
799	LSSC0676	HEAT SINK	5
E10	LSEP2132B	MAIN C.B.A. (A,B,C)	4,5 RTL
E10	LSEP2132A	MAIN C.B.A. (D,E,F)	4,5 RTL
E11	LSEP2133A	AUDIO C.B.A.	5 RTL
E20	LSEP2141A	Hi-Fi AUDIO/VIDEO HEAD AMP C.B.A.	1 RTL
E30	LSEP2151B	TV MAIN C.B.A. (A,B,C)	4,5 RTL
E30	LSEP2151A	TV MAIN C.B.A. (D,E,F)	4,5 RTL
E31	LSEP2075A	DEFLECTION C.B.A. (D,E,F)	5 RTL
E40	LSEP2155A	POWER SUPPLY C.B.A.	4 RTL
E50	LSEP2153A	OPERATION C.B.A.	4 RTL
E60	LRP63022R	CRT C.B.A. (A,B,C)	4,5 RTL
E60	LSEP2079A	CRT C.B.A. (D,E,F)	4,5 RTL
E70	LSEP2145A	DVD MAIN C.B.A.	2 RTL MKI

Ref. No.	Part No.	Part Name & Description	Remarks
E80	LSEP2014A	DVD SUB C.B.A.	2 RTL MKI

SERVICE FIXTURES AND TOOLS

Ref. No.	Part No.	Part Name & Description	Remarks
	VFMS0003H6	VHS ALIGNMENT TAPE	MKE
	VFKS0081	GREASE	MKE
	VFK0329	POST ADJUSTMENT DRIVER	MKE
	VFK27	HEAD CLEANING STICK	MKE
	VFK0330	H-POSITION ADJUSTMENT DRIVER	MKE
	VFK1301	SILICONE GREASE	MKE
	DVDT-S01	DVD TEST DISC	SPC
	DVDT-S15	DVD TEST DISC	SPC
	LSUA0052	EXTENSION CABLE KIT	MKE
	LSUA0053	EXTENSION CABLE KIT	MKE
	LSUA0047	EXTENSION CABLE 13P	MKE
	LSUA0048	EXTENSION CABLE 16P	MKE
	LSUA0049	EXTENSION CABLE 19P	MKE
	LSUA0050	EXTENSION CABLE 7P	MKE
	LSUA0051	EXTENSION CABLE 2P	MKE

12.3. ELECTRICAL REPLACEMENT PARTS LIST

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - - - - - -	G
- - - - - - - - -	H
- - - - - - - - -	I

Definition of Parts supplier:

1. Parts with mark "MKI" in the Remarks column are supplied from MKI.

2. Parts without mark in the Remarks column are supplied from MKA.

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSEP2132B	MAIN C.B.A. (A,B,C)	E.S.D. RTL
E10	LSEP2132A	MAIN C.B.A. (D,E,F)	E.S.D. RTL
E11	LSEP2133A	AUDIO C.B.A.	RTL
E20	LSEP2141A	Hi-Fi AUDIO/VIDEO HEAD AMP C.B.A.	RTL
E30	LSEP2151B	TV MAIN C.B.A. (A,B,C)	RTL
E30	LSEP2151A	TV MAIN C.B.A. (D,E,F)	RTL
E31	LSEP2075A	DEFLECTION C.B.A. (D,E,F)	RTL
E40	LSEP2155A	POWER SUPPLY C.B.A.	RTL
E50	LSEP2153A	OPERATION C.B.A.	RTL
E60	LRP63022R	CRT C.B.A. (A,B,C)	RTL
E60	LSEP2079A	CRT C.B.A. (D,E,F)	RTL
E70	LSEP2145A	DVD MAIN C.B.A.	E.S.D. RTL MKI
E80	LSEP2014A	DVD SUB C.B.A.	RTL MKI

12.3.1. MAIN C.B.A.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
---------	G
---------	H
---------	I

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC3001	AN3479FBP-A	IC, LINEAR	
IC3201	MN3885S	IC, CCD 1H DELAY	E.S.D.
IC3351	C1AB00001487	IC, LINEAR	
IC3371	C1AB00001340	IC, LINEAR	
IC4501	C1BA00000367	IC, LIENAR	
IC4601	C1BB00000815	IC, LINEAR	
IC5301	AN15167A-VT	IC, LINEAR	
IC5352	C1AB00001682	IC, LINEAR	
IC5352	C1AB00001519	IC, LINEAR	
IC5651	C1AB00001288	IC, LOGIC	E.S.D.
IC5653	C1AB00001681	IC, LINEAR	
IC5653	C1AB00001518	IC, LINEAR	
IC6001	C2CBJG000385	IC, 16BIT MICROCONTROLLER	E.S.D.
IC6002	B3NAA0000049	PHOTO INTERRUPUTER	
IC6003	B3NAA0000049	PHOTO INTERRUPUTER	
IC6004	LSSK0034	IC, 2K EEP ROM (A,B,C)	E.S.D.
IC6004	LSSK0033	IC, 2K EEP ROM (D,E,F)	E.S.D.
IC6005	C0EBJ0000080	IC, CMOS STANDARD LOGIC	E.S.D.
IC6005	C0EBJ0000099	IC, CMOS STADNARD LOGIC	E.S.D.
IC6005	RN5VS47CA-TR	IC, CMOS STANDARD LOGIC	E.S.D.
IC6201	C1AB00001767	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q3001	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q3001	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q3002	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q3002	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q3003	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q3004	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q3004	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q3305	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q3305	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q4001	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q4001	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q4002	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q4003	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q4101	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q4103	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4103	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4104	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q4104	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q4172	UNR221100L	TRANSISTOR SI NPN CHIP	
Q4172	DTC114EK-TX	TRANSISTOR SI NPN CHIP	
Q5301	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5301	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5302	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5302	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5651	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5651	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5652	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5652	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5653	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5653	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5654	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5654	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5655	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5655	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5656	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5656	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5657	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5657	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5658	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5658	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5659	UNR221200L	TRANSISTOR SI NPN CHIP	
Q5659	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q5901	2SD225900A	TRANSISTOR SI NPN CHIP	
Q6001	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q6001	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q6002	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q6002	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q6003	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q6003	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q6005	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q6005	B1ADCF000001	TRANSISTOR SI PNP CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
Q6006	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q6006	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q6009	VEKS9440	PHOTO SENSOR ASS'Y	
Q6010	VEKS9440	PHOTO SENSOR ASS'Y	
Q6216	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q6216	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q6217	2SD225900A	TRANSISTOR SI NPN	
Q6301	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q6301	B1ADCF000001	TRANSISTOR SI PNP CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D4507	MA2C165001VT	DIODE SI	
D4507	B0AACK000004	DIODE SI	
D4507	1SS119	DIODE SI	
D4508	MA2C165001VT	DIODE SI	
D4508	B0AACK000004	DIODE SI	
D4508	1SS119	DIODE SI	
D4601	B0AAML000001	DIODE SI	
D4601	B0EAKL000008	DIODE SI	
D5304	MA2C165001VT	DIODE SI	
D5304	B0AACK000004	DIODE SI	
D5304	1SS119	DIODE SI	
D5501	MAZ40620L1KT	DIODE ZENER 6.2V	⚠
D6001	B3EA00000072	SENSOR LED	
D6002	MA2C165001VT	DIODE SI	
D6002	B0AACK000004	DIODE SI	
D6002	1SS119	DIODE SI	
D6003	MA2C165001VT	DIODE SI	
D6003	B0AACK000004	DIODE SI	
D6003	1SS119	DIODE SI	
D6004	MA2C165001VT	DIODE SI	
D6004	B0AACK000004	DIODE SI	
D6004	1SS119	DIODE SI	
D6005	MA2C165001VT	DIODE SI	
D6005	B0AACK000004	DIODE SI	
D6005	1SS119	DIODE SI	
D6006	MA2C165001VT	DIODE SI	
D6006	B0AACK000004	DIODE SI	
D6006	1SS119	DIODE SI	
D6009	MA2C165001VT	DIODE SI	
D6009	B0AACK000004	DIODE SI	
D6009	1SS119	DIODE SI	
D6010	MA2C165001VT	DIODE SI	
D6010	B0AACK000004	DIODE SI	
D6010	1SS119	DIODE SI	
D6011	MA2C165001VT	DIODE SI	
D6011	B0AACK000004	DIODE SI	
D6011	1SS119	DIODE SI	
D6201	MA2C165001VT	DIODE SI	
D6201	B0AACK000004	DIODE SI	
D6201	1SS119	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D6202	MA2C165001VT	DIODE SI	
D6202	B0AACK000004	DIODE SI	
D6202	1SS119	DIODE SI	
D6204	MAZ4047NMF	DIODE ZENER 4.7V	
D6301	B3AAA0000538	LIGHT EMITTING DIODE RED	
D6302	B3AAA0000538	LIGHT EMITTING DIODE RED	
D6303	B3ABA0000400	LIGHT EMITTING DIODE GREEN	
D6304	B3ACA0000192	LIGHT EMITTING DIODE ORANGE	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R3001	ERDS2TJ101	CARBON 1/4W 100	
R3002	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R3006	ERDS2TJ101	CARBON 1/4W 100	
R3007	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3008	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3016	ERJ6GEYJ121V	MGF CHIP 1/10W 120	
R3017	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R3024	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R3025	ERJ6GEYJ125V	MGF CHIP 1/10W 1.2M	
R3026	ERJ6GEYJ474V	MGF CHIP 1/10W 470K	
R3028	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R3029	ERJ6GEYJ151V	MGF CHIP 1/10W 150	
R3032	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R3035	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R3036	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3037	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3038	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R3076	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R3077	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R3078	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R3079	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3080	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3084	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3086	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R3343	ERDS2TJ562	CARBON 1/4W 5.6K	
R3347	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R3349	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R3351	ERJ6GEYJ181V	MGF CHIP 1/10W 180	
R3352	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R3371	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3372	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R3373	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R3374	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4001	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4002	ERJ6GEYJ334V	MGF CHIP 1/10W 330K	
R4003	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R4004	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4005	ERJ6GEYJ225V	MGF CHIP 1/10W 2.2M	
R4006	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R4007	ERJ6GEYJ821V	MGF CHIP 1/10W 820	
R4008	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R4009	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	

Ref. No.	Part No.	Part Name & Description	Remarks
R4010	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4011	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R4012	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R4014	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4015	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R4031	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4032	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R4051	ERJ6GEYJ393V	MGF CHIP 1/10W 39K	
R4052	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R4101	ERJ6GEYJ563V	MGF CHIP 1/10W 56K	
R4102	ERJ6GEYJ154V	MGF CHIP 1/10W 150K	
R4103	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R4104	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4105	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4502	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4503	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4504	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4505	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4506	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4601	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4602	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4603	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K (A,B,C)	
R4603	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K (D,E,F)	
R4604	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K (A,B,C)	
R4604	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K (D,E,F)	
R4605	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4606	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R4607	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4608	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R4609	ERJ6GEYJ105V	MGF CHIP 1/10W 1M	
R4610	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4611	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5301	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5302	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R5303	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R5304	ERJ6GEYJ393V	MGF CHIP 1/10W 39K	
R5305	ERJ6GEYJ224V	MGF CHIP 1/10W 220K	
R5306	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R5308	ERJ6GEYJ393V	MGF CHIP 1/10W 39K	
R5309	ERJ6GEYJ184V	MGF CHIP 1/10W 180K	
R5311	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5312	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5313	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5314	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5315	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5316	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5317	ERDS2TJ101	CARBON 1/4W 100	
R5318	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5324	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5353	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5354	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5356	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5401	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5402	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	

Ref. No.	Part No.	Part Name & Description	Remarks
R5403	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R5405	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R5406	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5501	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5502	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R5503	ERDS2TJ471	CARBON 1/4W 470	
R5504	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5505	ERJ6ENF3241V	MGF CHIP 1/10W 3.24K	⚠
R5506	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R5508	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5509	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5510	ERDS2TJ101	CARBON 1/4W 100	
R5511	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5512	ERDS2TJ151	CARBON 1/4W 150	
R5513	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5515	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R5604	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R5651	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R5652	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5653	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R5654	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R5655	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5656	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R5657	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R5658	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R5659	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5660	ERJ6GEYJ821V	MGF CHIP 1/10W 820	
R5661	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R5662	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R5663	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5665	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5666	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5668	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5670	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5674	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R5675	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R5676	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R5677	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R5678	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R5679	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5680	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5681	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5682	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5683	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5902	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5904	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5932	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5933	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6001	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6002	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6003	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6004	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6005	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R6006	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6007	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6008	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6009	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6010	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R6011	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6012	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6013	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6014	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6015	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6016	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6017	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6018	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6019	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6020	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6021	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6022	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6023	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6024	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6025	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6026	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6027	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6028	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6029	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6034	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R6036	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6039	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6041	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6042	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6043	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6047	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6048	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6050	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6051	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6054	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6056	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6058	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6059	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6060	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R6061	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6062	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R6063	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R6064	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R6065	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R6066	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6067	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6068	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6069	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6070	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6071	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6072	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6073	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6074	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6075	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R6078	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6079	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6080	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6081	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6082	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6083	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6085	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6086	ERJ6GEYJ105V	MGF CHIP 1/10W 1M	
R6087	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R6089	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6093	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6094	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R6095	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6098	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6101	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6102	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6103	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R6104	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6105	ERDS2TJ151	CARBON 1/4W 150	
R6106	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6108	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6109	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6110	ERJ6GEYJ121V	MGF CHIP 1/10W 120	
R6111	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6112	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6113	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6114	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R6115	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6117	ERDS2TJ560T	CARBON 1/4W 56	
R6118	ERJ6GEYJ475V	MGF CHIP 1/10W 4.7M	
R6119	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R6120	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R6121	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6122	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6123	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6129	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6130	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6201	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6202	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6203	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6204	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6205	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6206	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6207	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6208	ERJ6GEYJ1R2V	MGF CHIP 1/10W 1.2	
R6209	ERJ6GEYJ1R5V	MGF CHIP 1/10W 1.5	
R6210	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6211	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6212	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6213	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6214	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R6215	ERDS2TJ561	CARBON 1/4W 560	
R6216	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R6301	ERJ6GEYG222V	MGF CHIP 1/10W 2.2K	
R6302	ERJ6GEYG332V	MGF CHIP 1/10W 3.3K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6303	ERJ6GEYG562V	MGF CHIP 1/10W 5.6K	
R6304	ERJ6GEYG113V	MGF CHIP 1/10W 11K	
R6305	ERJ6GEYG333V	MGF CHIP 1/10W 33K	
R6306	ERJ6GEYG222V	MGF CHIP 1/10W 2.2K	
R6307	ERJ6GEYG332V	MGF CHIP 1/10W 3.3K	
R6308	ERJ6GEYG562V	MGF CHIP 1/10W 5.6K	
R6309	ERJ6GEYG113V	MGF CHIP 1/10W 11K	
R6310	ERJ6GEYG333V	MGF CHIP 1/10W 33K	
R6311	ERJ6GEYG222V	MGF CHIP 1/10W 2.2K	
R6312	ERJ6GEYG332V	MGF CHIP 1/10W 3.3K	
R6316	ERJ6GEYG113V	MGF CHIP 1/10W 11K	
R6317	ERJ6GEYG113V	MGF CHIP 1/10W 11K	
R6318	ERJ6GEYG113V	MGF CHIP 1/10W 11K	
R6319	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6321	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6322	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6323	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6324	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R6325	ERJ6GEYJ683V	MGF CHIP 1/10W 68K	
R6401	ERJ6GEYJ105V	MGF CHIP 1/10W 1M	
R6407	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6511	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6512	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6513	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R6514	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6515	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6516	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6517	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6522	ERJ6GEY0R00V	MGF CHIP 1/10W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C3003	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3004	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3006	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3007	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3008	ECJ2VC1H181J	C CHIP 50V 180PF	
C3009	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C3010	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3012	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C3013	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C3015	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C3016	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3018	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3020	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C3022	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C3023	ECJ2VC1H680J	C CHIP 50V 68PF	
C3024	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3025	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C3026	ECJ2VB1H822K	C CHIP 50V 8200PF	
C3027	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C3028	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C3030	ECJ2VF1H103Z	C CHIP 50V 0.01UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C3031	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3032	ECJ2VF1C474Z	C CHIP 16V 0.47UF	
C3034	ECJ2VC1H181J	C CHIP 50V 180PF	
C3035	ECJ2VC1H330J	C CHIP 50V 33PF	
C3036	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3037	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3038	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3041	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3043	ECJ2VB1H392K	C CHIP 50V 3900PF	
C3044	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3045	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C3046	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C3047	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3050	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C3055	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3056	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C3057	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3058	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3082	ECJ2VB1H152K	C CHIP 50V 1500PF	
C3084	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3231	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C3232	ECJ2VB1H102K	C CHIP 50V 1000PF	
C3234	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C3235	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3236	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3237	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3352	ECJ2VC1H220J	C CHIP 50V 22PF	
C3353	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3355	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3356	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3372	ECJ2VC1H220J	C CHIP 50V 22PF	
C3373	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3377	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3378	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4001	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C4002	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4003	ECJ2VB1H272K	C CHIP 50V 2700PF	
C4004	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4005	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C4006	ECJ2VB1H102K	C CHIP 50V 1000PF	
C4007	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C4008	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C4009	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4010	ECJ2VB1E333K	C CHIP 25V 0.033UF	
C4011	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4012	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4013	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C4014	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4051	ECJ2VB1E333K	C CHIP 25V 0.033UF	
C4102	ECQB1562JF3	POLYESTER 100V 5600PF	
C4103	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4104	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4105	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C4501	ECEA1CKA220	ELECTROLYTIC 16V 22UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C4502	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4503	ECJ2VB1H122K	C CHIP 50V 1200PF	
C4504	ECJ2VB1H122K	C CHIP 50V 1200PF	
C4505	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4506	ECEA1HKA4R7	ELECTROLYTIC 50V 4.7UF	
C4507	ECA1EM471B	ELECTROLYTIC 25V 470UF	
C4508	ECA1EM471B	ELECTROLYTIC 25V 470UF	
C4509	ECA1CM101I	ELECTROLYTIC 16V 100UF	
C4510	ECA1EM471B	ELECTROLYTIC 25V 470UF	
C4601	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C4602	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4603	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C4604	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4605	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C4607	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C4608	ECEA1HKA4R7	ELECTROLYTIC 50V 4.7UF	
C4610	ECEA1HKA4R7	ELECTROLYTIC 50V 4.7UF	
C4612	ECEA1HKA4R7	ELECTROLYTIC 50V 4.7UF	
C4614	ECJ2VB1E823K	C CHIP 25V 0.082UF	
C4615	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C4617	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4619	ECJ2YB1C334K	C CHIP 16V 0.33UF	
C4621	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4622	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4623	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4624	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4627	ECJ2VC1H560J	C CHIP 50V 56PF	
C4628	ECJ2VC1H560J	C CHIP 50V 56PF	
C4629	ECA1CM102B	ELECTROLYTIC 16V 1000UF	
C5301	ECEA1CKN100	ELECTROLYTIC 16V 10UF	
C5302	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C5303	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C5305	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C5306	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5307	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5308	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5353	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5354	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5356	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5358	ECJ2VC1H220J	C CHIP 50V 22PF	
C5359	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5360	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C5401	VCUSTBC224KB	C CHIP 16V 0.22UF	
C5402	ECJ2VB1H222K	C CHIP 50V 2200PF	
C5403	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C5501	ECJ2VB1E183K	C CHIP 25V 0.018UF	
C5502	ECJ2VB1H681K	C CHIP 50V 680PF	
C5505	ECA1CM221	ELECTROLYTIC 16V 220UF	
C5506	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5507	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5508	ECUV1H221JSN	C CHIP 50V 220PF	
C5510	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5511	ECJ2VB1E333K	C CHIP 25V 0.033UF	
C5516	ECJ2VB1E333K	C CHIP 25V 0.033UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5601	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5602	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C5603	ECJ2VC1H150J	C CHIP 50V 15PF	
C5604	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5605	ECJ2VB1E153K	C CHIP 25V 0.015UF	
C5652	ECJ2VC1H100C	C CHIP 50V 10PF	
C5653	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5654	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5655	ECJ2VC1H270J	C CHIP 50V 27PF	
C5656	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C5657	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5658	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5659	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5660	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5661	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C5662	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C5663	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5664	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5665	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5666	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C5668	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5669	ECJ2VC1H181J	C CHIP 50V 180PF	
C5670	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5671	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5672	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5673	ECJ2VC1H560J	C CHIP 50V 56PF	
C5674	ECJ2VC1H390J	C CHIP 50V 39PF	
C5675	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5676	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C5677	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5678	ECEA1CKS220	ELECTROLYTIC 16V 22UF	
C5680	ECJ2VC1H270J	C CHIP 50V 27PF	
C5681	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5685	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5686	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5687	ECJ2VC1H220J	C CHIP 50V 22PF	
C5688	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5689	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5690	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C5902	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C5903	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C5904	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C5905	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C5906	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5932	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5933	ECJ2VC1H560J	C CHIP 50V 56PF	
C5934	ECJ2VC1H560J	C CHIP 50V 56PF	
C6001	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C6002	ECJ2VC1H220J	C CHIP 50V 22PF	
C6003	ECJ2VC1H180J	C CHIP 50V 18PF	
C6005	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C6006	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C6007	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6008	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C6010	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6016	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C6019	ECJ2VC1H330J	C CHIP 50V 33PF	
C6020	ECEA1HKS010	ELECTROLYTIC 50V 1UF	
C6021	ECEA0JKN220I	ELECTROLYTIC 6.3V 22UF	
C6022	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C6023	ECJ2VB1H272K	C CHIP 50V 2700PF	
C6024	ECJ2VB1H123K	C CHIP 50V 0.012UF	
C6025	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C6026	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6027	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C6030	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6032	ECJ2VC1H101J	C CHIP 50V 100PF	
C6037	ECJ2VB1H102K	C CHIP 50V 1000PF	
C6041	ECJ2VB1H681K	C CHIP 50V 680PF	
C6101	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6102	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6201	ECJ2VB1E563K	C CHIP 25V 0.056UF	
C6202	ECJ2VB1E563K	C CHIP 25V 0.056UF	
C6203	ECJ2VB1H562K	C CHIP 50V 5600PF	
C6204	ECJ2VB1H562K	C CHIP 50V 5600PF	
C6205	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C6206	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C6207	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C6208	ECJ2VB1H223K	C CHIP 50V 0.022UF	
C6209	ECJ2VB1H223K	C CHIP 50V 0.022UF	
C6210	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C6211	ECJ2VB1H102K	C CHIP 50V 1000PF	
C6212	ECJ2VB1H102K	C CHIP 50V 1000PF	
C6213	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C6214	ECJ2VB1H182K	C CHIP 50V 1800PF	
C6215	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6216	ECEA0JKA221	ELECTROLYTIC 6.3V 220UF	
C6217	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C6218	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C6219	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C6220	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C6221	ECA1EM221B	ELECTROLYTIC 25V 220UF	
C6222	ECEA0JKA221	ELECTROLYTIC 6.3V 220UF	
C6228	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C6302	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6401	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6402	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6403	ECJ2VB1H102K	C CHIP 50V 1000PF	
C6404	ECJ2VB1E333K	C CHIP 25V 0.033UF	
C6405	ECJ2VB1H102K	C CHIP 50V 1000PF	
C6406	ECJ2VC1H561J	C CHIP 50V 560PF	
C6407	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C6408	ECJ1VC1H820J	C CHIP 50V 82PF	
C6409	ECJ2VC1H101J	C CHIP 50V 100PF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL4051	G2BMC0000002	FILTER	
FL5651	F1Y2A1030005	L/C COMPLEX COMPONENT	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L3001	G0C390KA0045	COIL 39UH	
L3002	VLQSAB7D101K	COIL 100UH	
L3005	G0C330KA0045	COIL 33UH	
L3007	VLQSAB7D470K	COIL 47UH	
L3231	ELESN221KA	COIL 220UH	
L4001	G0C153K00003	COIL 15MH	
L4002	ELESN101KA	COIL 100UH	
L4003	G0C150KA0045	COIL 15UH	
L4101	ELESN471KA	COIL 470UH	
L4601	ELESN101KA	COIL 100UH	
L5351	ELESN101KA	COIL 100UH	
L5652	ELESN150KA	COIL 15UH	
L5653	LSLQF06R101K	COIL 100UH	
L5654	ELESN4R7KA	COIL 4.7UH	
L5655	ELESN101KA	COIL 100UH	
L5656	ELESN101KA	COIL 100UH	
L5657	ELESN101KA	COIL 100UH	
L5658	ELESN101KA	COIL 100UH	
L5659	ELESN101KA	COIL 100UH	
L5660	ELESN101KA	COIL 100UH	
L5901	ELESN101KA	COIL 100UH	
L6401	ELEXT101KE04	COIL 100UH	
L6402	G0C4R7JA0019	CIOL 4.7UH	
L6403	J0JBC0000022	CHIP BEAD INDUCTOR	
L6404	J0JBC0000022	CHIP BEAD INDUCTOR	
L6405	J0JBC0000022	CHIP BEAD INDUCTOR	
L6406	J0JBC0000022	CHIP BEAD INDUCTOR	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X3001	H0D357400071	CRYSTAL OSCILLATOR	
X5501	H2A503300012	CRYSTAL OSCILLATOR	
X5601	H0B357400003	CRYSTAL OSCILLATOR	
X6001	H0D120500017	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P1201	K1KA12A00176	CONNECTOR 12P	
P3001	K1MN15A00062	CONNECTOR 15P	
P4001	K1MZ02A00003	FE CONNECTOR 2P	
P4002	K1MN06A00030	CONNECTOR 6P	
P4003	K1MN13A00049	CONNECTOR 13P	
P4004	K1MN13A00049	CONNECTOR 13P	
P4005	K1MN13A00049	CONNECTOR 13P	
P4501	K1KA02A00229	CONNECTOR 2P	
P4502	K1KA02A00229	CONNECTOR 2P	
P4503	K1KA05A00177	CONNECTOR 5P	
P4506	VEKS5898	CONNECTOR CABLE W/PLUG	
P4801	K1MN16A00071	CONNECTOR 16P	
P5302	K1MP04A00006	CONNECTOR 4P	
P5401	K1MN19A00037	CONNECTOR 19P	
P6001	K1KA05A00268	CONNECTOR 5P	
P6201	K1KA08A00290	CONNECTOR 8P	
P6202	K1MN07A00017	CONNECTOR 7P	
P6203	K1KA02A00375	CONNECTOR 2P	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6001	K0C111A00006	SWITCH	
SW6002	K0ZZ00000598	SWITCH	
SW6301	EVQ21405R	SWITCH PUSH	
SW6302	EVQ21405R	SWITCH PUSH	
SW6303	EVQ21405R	SWITCH PUSH	
SW6304	EVQ21405R	SWITCH PUSH	
SW6305	EVQ21405R	SWITCH PUSH	
SW6306	EVQ21405R	SWITCH PUSH	
SW6307	EVQ21405R	SWITCH PUSH	
SW6308	EVQ21405R	SWITCH PUSH	
SW6309	EVQ21405R	SWITCH PUSH	
SW6310	EVQ21405R	SWITCH PUSH	
SW6311	EVQ21405R	SWITCH PUSH	
SW6312	EVQ21405R	SWITCH PUSH	
SW6314	EVQ21405R	SWITCH PUSH	

TRANSFORMER

Ref. No.	Part No.	Part Name & Description	Remarks
T4101	G2A342C00003	TRANSFORMER	

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E11	LSEP2133A	AUDIO C.B.A.	RTL

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
487	XYN3+J8	SCREW W/WASHER,STEEL	
711	PNA4611M00HC	INFRARED RECEIVER UNIT	
798	TMM7464-1R	CLAMPER	
799	LSSC0676	HEAT SINK	

12.3.2. AUDIO C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC4201	AN3663FBP-V	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q4003	UNR511500L	TRANSISTOR COMPLX CMP SI NPN CHIP	
Q4003	B1GDCFJJ0025	TRANSISTOR COMPLX CMP SI NPN CHIP	
Q4004	UNR511500L	TRANSISTOR COMPLX CMP SI NPN CHIP	
Q4004	B1GDCFJJ0025	TRANSISTOR COMPLX CMP SI NPN CHIP	
Q4005	2SD132800L	TRANSISTOR SI NPN CHIP	
Q4005	B1ABEC000006	TRANSISTOR SI NPN CHIP	
Q4006	2SD132800L	TRANSISTOR SI NPN CHIP	
Q4006	B1ABEC000006	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D4210	MA2C165001VT	DIODE SI	
D4210	B0AACK000004	DIODE SI	
D4210	1SS119	DIODE SI	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R4201	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4202	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4203	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R4204	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R4205	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4206	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4207	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R4208	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R4209	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4210	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4211	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R4212	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R4213	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4214	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4215	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R4217	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4218	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R4219	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R4224	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4225	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4226	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R4229	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4230	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4231	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R4232	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R4233	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4234	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R4251	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4453	ERJ6GEYJ184V	MGF CHIP 1/10W 180K	
R4903	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C4201	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4202	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4203	ECEA0JKA330I	ELECTROLYTIC 6.3V 33UF	
C4204	ECEA0JKA330I	ELECTROLYTIC 6.3V 33UF	
C4205	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4206	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4207	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4208	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4209	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4210	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4211	ECJ2VB1H153K	C CHIP 50V 0.015UF	
C4212	ECJ2VB1H153K	C CHIP 50V 0.015UF	
C4213	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4214	ECEA1CKA101I	ELECTROLYTIC 16V 100UF	
C4215	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4217	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C4218	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4219	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4227	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C4229	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4230	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C4239	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4240	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4241	ECJ2VC1H560J	C CHIP 50V 56PF	
C4242	ECJ2VC1H560J	C CHIP 50V 56PF	
C4451	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4452	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4455	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4456	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4458	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4459	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C4901	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4902	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C4903	ECEA1HKA3R3I	ELECTROLYTIC 50V 3.3UF	
C4904	ECEA1HKA3R3I	ELECTROLYTIC 50V 3.3UF	
C4905	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4906	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4911	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C4912	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4913	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4914	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C4915	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C4916	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4917	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4918	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4919	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4920	ECJ2VB1E223K	C CHIP 25V 0.022UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L4201	ELESN101KA	COIL 100UH	
L4451	ELESN101KA	COIL 100UH	
L4901	ELESN101KA	COIL 100UH	
L4902	ELESN101KA	COIL 100UH	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P4201	VJHS0293	PACK PIN 3P	
P4202	VJHS0293	PACK PIN 3P	
P4203	VJHS0293	PACK PIN 3P	
P4204	VJHS0297	PACK PIN 7P	
P4205	VJHS0299	PACK PIN 9P	
P4206	VJHS0298	PACK PIN 8P	
P4207	VJHS0298	PACK PIN 8P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
715	LUL23004A	METAL PLATE,STEEL	

12.3.3. Hi-Fi AUDIO / VIDEO HEAD AMP C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC3501	AN3361SB	IC, LINEAR	
IC4401	AN3328S	IC, LINEAR	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R3501	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R3502	ERJ6GEYJ560V	MGF CHIP 1/10W 56	
R3503	ERJ6GEYJ560V	MGF CHIP 1/10W 56	
R3504	ERJ6GEYJ560V	MGF CHIP 1/10W 56	
R3505	ERJ6GEYJ560V	MGF CHIP 1/10W 56	
R3506	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R3507	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R4405	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4406	ERJ6GEYJ180V	MGF CHIP 1/10W 18	
R4407	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R4410	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4411	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C3504	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3505	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C3506	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3507	ECJ2VB1H102K	C CHIP 50V 1000PF	
C3508	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3511	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3512	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3513	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3519	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3520	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3523	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3524	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3528	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3529	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3532	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3533	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4401	ECJ2VB1H102K	C CHIP 50V 1000PF	
C4402	ECJ2VB1H102K	C CHIP 50V 1000PF	
C4405	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4406	ECJ2VB1H472K	C CHIP 50V 4700PF	
C4408	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4409	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4411	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
C4412	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4413	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4414	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L3501	G0C101KA0045	COIL 100UH	
L4401	G0C101KA0045	COIL 100UH	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P3501	K1MN15B00106	CONNECTOR 15P	
P3502	VEKS5851-1	1P CUUPLER	

12.3.4. TV MAIN C.B.A.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
---------	G
---------	H
---------	I

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC451	C1AA00000024	IC, LINEAR	
IC850	C5HABZZ00109	IC, LINEAR (A,B,C)	⚠
IC850	C5HABZZ00110	IC, LINEAR (D,E,F)	⚠

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q431	2SA1309AHA	TRANSISTOR SI PNP CHIP	
Q431	B1ACCF000047	TRANSISTOR SI PNP CHIP	
Q501	B1AACN000013	TRANSISTOR SI NPN (A,B,C)	
Q501	2SC3941H	TRANSISTOR SI NPN (D,E,F)	
Q523	B1ACBM000001	TRANSISTOR SI PNP CHIP	
Q523	B1ACBN000001	TRANSISTOR SI PNP CHIP	
Q523	2SA17670QA	TRANSISTOR SI PNP CHIP	
Q523	2SB12210QA	TRANSISTOR SI PNP CHIP	
Q541	2SB0709AHL	TRANSISTOR SI PNP CHIP	
Q541	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q551	2SC5913000LK	TRANSISTOR SI NPN (A,B,C)	⚠
Q551	B1BAES000001	TRANSISTOR SI NPN (D,E,F)	⚠
Q571	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q571	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q591	2SC3311AHA	TRANSISTOR SI PNP CHIP	
Q801	2SC3311ARA	TRANSISTOR SI NPN	
Q801	2SC3311ASA	TRANSISTOR SI NPN	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D401	B0AAML000001	DIODE SI	
D401	1SR139-400	DIODE SI	
D402	MA2C165001VT	DIODE SI	
D402	B0AACK000004	DIODE SI	
D402	1SS119	DIODE SI	
D503	B0HAGP000014	DIODE SI	
D503	B0HAJP000024	DIODE SI	
D504	MAZ40470MF	DIODE ZENER 4.7V	
D504	B0BA4R600003	DIODE ZENER 4.7V	
D504	RD4.7ESAB2	DIODE ZENER 4.7V	
D505	MA2C165001VT	DIODE SI	
D505	B0AACK000004	DIODE SI	
D505	1SS119	DIODE SI	
D506	MAZ42700MF	DIODE ZENER 27V (D,E,F)	
D541	MA2C165001VT	DIODE SI	
D541	B0AACK000004	DIODE SI	
D541	1SS119	DIODE SI	
D553	B0HAGP000014	DIODE SI	
D553	B0HAJP000024	DIODE SI	
D554	MA2C16700E	DIODE SI	
D554	B0AAEL000001	DIODE SI	
D555	MAZ40680MF	DIODE ZENER 6.8V	

Ref. No.	Part No.	Part Name & Description	Remarks
D555	B0BA6R600008	DIODE ZENER 6.8V	
D555	RD6.8ESAB3	DIODE ZENER 6.8V	
D555	04AZ6.8ZTPA7	DIODE ZENER 6.8V	
D558	B0HAGP000014	DIODE SI	
D558	B0HAJP000024	DIODE SI	
D571	RH3F014305	DIODE SI	
D571	B0HAMV000028	DIODE SI	
D572	RU3ANLFC1	DIODE SI (D,E,F)	
D572	B0HAMR000060	DIODE SI (D,E,F)	
D572	B0HAMR000063	DIODE SI (D,E,F)	
D591	D4DDD3R00002	THERMISTOR	⚠
D591	D4DDD3R00003	THERMISTOR	⚠
D592	MA2C16700E	DIODE SI	
D592	B0AAEL000001	DIODE SI	
D801	ERZV10V361CS	SURGE ABSORBER	⚠
D801	D4EAA3610001	SURGE ABSORBER	⚠
D803	MA2C16700E	DIODE SI	
D803	B0AAEL000001	DIODE SI	
D804	B0AAKT000010	DIODE SI	⚠
D804	B0EAKT000027	DIODE SI	⚠
D804	B0EAKT000030	DIODE SI	⚠
D805	B0AAKT000010	DIODE SI	⚠
D805	B0EAKT000027	DIODE SI	⚠
D805	B0EAKT000030	DIODE SI	⚠
D806	B0AAKT000010	DIODE SI	⚠
D806	B0EAKT000027	DIODE SI	⚠
D806	B0EAKT000030	DIODE SI	⚠
D807	B0AAKT000010	DIODE SI	⚠
D807	B0EAKT000027	DIODE SI	⚠
D807	B0EAKT000030	DIODE SI	⚠
D854	B0JAMD000012	DIODE SI	
D854	B0JAGE000001	DIODE SI	
D854	B0JAME000082	DIODE SI	
D856	B0HAGP000012	DIODE SI	
D857	B0HAJL000001	DIODE SI	
D857	B0HAGP000012	DIODE SI	
D858	B0HAJL000001	DIODE SI	
D858	B0HAGP000012	DIODE SI	
D859	B0JANK000003	DIODE SI CHIP	
D859	B0JAMK000016	DIODE SI	
D860	B0EALR000005	DIODE SI	
D860	B0HAMR000063	DIODE SI	
D861	MAZ2270	DIODE ZENER 27V	⚠
D863	B0HAHP000014	DIODE SI	
D863	B0HAJP000007	DIODE SI	
D863	B0HAMP000061	DIODE SI	
D863	B0HAMP000069	DIODE SI	
D864	B0HAMM000105	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D864	B0HAML000013	DIODE SI	
D864	B0HAML000014	DIODE SI	
D864	B0HANL000016	DIODE SI	
D864	RGP15GL-5008	DIODE SI	
D865	B0HAMM000105	DIODE SI	
D865	B0HAML000013	DIODE SI	
D865	B0HAML000014	DIODE SI	
D865	B0HANL000016	DIODE SI	
D865	RGP15GL-5008	DIODE SI	
D866	B0HAMM000105	DIODE SI (D,E,F)	
D866	B0HAML000013	DIODE SI (D,E,F)	
D866	B0HAML000014	DIODE SI (D,E,F)	
D866	B0HANL000016	DIODE SI (D,E,F)	
D866	RGP15GL-5008	DIODE SI (D,E,F)	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R401	ERJ6GEYJ561V	MGF CHIP 1/10W 560 (A,B,C)	
R401	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K (D,E,F)	
R402	ERDS2TJ223	CARBON 1/4W 22K (A,B,C)	
R402	ERDS2TJ183T	CARBON 1/4W 18K (D,E,F)	
R405	ERG1SJ331P	METAL OXIDE 1W 330	
R409	ERJ6GEYJ273V	MGF CHIP 1/10W 27K (A,B,C)	
R409	ERJ6GEYJ223V	MGF CHIP 1/10W 22K (D,E,F)	
R410	ERDS2TJ392	CARBON 1/4W 3.9K (A,B,C)	
R410	ERDS2TJ223	CARBON 1/4W 22K (D,E,F)	
R411	ERJ6GEYJ823V	MGF CHIP 1/10W 82K (A,B,C)	
R411	ERJ6GEYJ223V	MGF CHIP 1/10W 22K (D,E,F)	
R413	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R414	ERDS1FJ1R2P	CARBON 1/2W 1.2 (A,B,C)	⚠
R414	ERDS1FJ1R8P	CARBON 1/2W 1.8 (D,E,F)	⚠
R415	ERDS1FJ1R8P	CARBON 1/2W 1.8 (D,E,F)	⚠
R416	ERDS2TJ101	CARBON 1/4W 100 (D,E,F)	
R422	ERDS2TJ331	CARBON 1/4W 330	
R427	ERDS1FJ1R5P	CARBON 1/2W 1.5	⚠
R431	ERDS2TJ821	CARBON 1/4W 820	
R432	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R433	ERJ6GEYJ183V	MGF CHIP 1/10W 18K (A,B,C)	
R433	ERJ6GEYJ102V	MGF CHIP 1/10W 1K (D,E,F)	
R434	ERDS2TJ472	CARBON 1/4W 4.7K	
R435	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R436	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R466	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R468	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R471	ERDS1FJ152P	CARBON 1/2W 1.5K	⚠
R501	ERDS2TJ471	CARBON 1/4W 470	
R502	ERDS2TJ561	CARBON 1/4W 560	
R503	ER0S2THF8661	PRECISION METAL FILM 1/4W 8.66K	⚠
R503	ER0S2TKF8661	PRECISION METAL FILM 1/4W 8.66K	⚠
R503	VRESR4TF8661	PRECISION METAL FILM 1/4W 8.66K	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
R508	ERDS1FJ1R0P	CARBON 1/2W 1	⚠
R509	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R511	ERG2SJ222H	METAL OXIDE 2W 2.2K (A,B,C)	
R511	ERG2SJ272H	METAL OXIDE 2W 2.7K (D,E,F)	
R512	ERDS2TJ122	CARBON 1/4W 1.2K (A,B,C)	
R513	ERDS2TJ472	CARBON 1/4W 4.7K	
R515	ERDS2TJ122	CARBON 1/4W 1.2K (D,E,F)	
R516	LAR05222J09	W FLMPRF 5W 2.2K (A,B,C)	
R516	LAR05152J09	W FLMPRF 5W 1500 (D,E,F)	
R519	ERDS2TJ123	CARBON 1/4W 12K	
R523	ERDS2TJ563T	CARBON 1/4W 56K (D,E,F)	
R524	ERDS2TJ103	CARBON 1/4W 10K	
R525	ERDS2TJ124	CARBON 1/4W 120K	
R526	ERX2SJR75H	METAL OXIDE 2W 0.75	⚠
R541	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R542	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R543	ERJ6GEYJ274V	MGF CHIP 1/10W 270K	
R544	ERJ6GEYJ823V	MGF CHIP 1/10W 82K	
R545	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R551	ERDS2TJ393	CARBON 1/4W 39K (A,B,C)	
R552	ERDS2TJ822	CARBON 1/4W 8.2K	
R553	ERDS2TJ102	CARBON 1/4W 1K	
R554	ERG2SJ102H	METAL OXIDE 2W 1K	
R555	ERDS2TJ473	CARBON 1/4W 47K (A,B,C)	
R555	ERDS2TJ333T	CARBON 1/4W 33K (D,E,F)	
R556	ERDS2TJ473	CARBON 1/4W 47K (A,B,C)	
R556	ERDS2TJ223	CARBON 1/4W 22K (D,E,F)	
R561	ERQ1CJP2R7S	FUSE 1W 2.7 (A,B,C)	⚠
R561	ERQ1CJP2R2S	FUSE 1W 2.2 (D,E,F)	⚠
R562	ERF5ZK3R9	W FLMPRF 5W 3.9 (A,B,C)	
R562	ERF5ZK2R2	W FLMPRF 5W 2.2 (D,E,F)	
R571	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R572	ERDS2TJ561	CARBON 1/4W 560	
R573	ERDS2TJ101	CARBON 1/4W 100	
R574	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R585	ERDS2TJ683	CARBON 1/4W 68K (D,E,F)	
R586	ERDS2TJ562	CARBON 1/4W 5.6K	
R587	ERDS2TJ153	CARBON 1/4W 15K (D,E,F)	
R591	ERDS2TJ103	CARBON 1/4W 10K	
R592	ERDS2TJ472	CARBON 1/4W 4.7K	
R701	ERQ1ABJP560S	FUSE 1W 560 (D,E,F)	⚠
R710	ERQ1CJP6R8S	FUSE 1W 6.8 (D,E,F)	⚠
R789	ERDS2TJ101	CARBON 1/4W 100	
R801	VRESC2TK825T	RESISTOR SOLID 1/2W 8.2M	⚠
R802	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R803	ERDS2TJ103	CARBON 1/4W 10K	
R804	ERF5ZKR82	W FLMPRF 5W 0.82	⚠
R804	LSREFDWKR82Z	W FLMPRF 5W 0.82	⚠
R850	D0AF184JA038	CARBON 1/2W 180K	
R851	ERD2FCG681V	FUSE 1/4W 680	⚠
R852	ERDS2TJ683	CARBON 1/4W 68K	

Ref. No.	Part No.	Part Name & Description	Remarks
R853	ERDS2TJ683	CARBON 1/4W 68K	
R855	ERX2SZJR10P	RESISTOR METAL FILM 2W 0.1	
R857	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R858	ERDS2TJ4R7	CARBON 1/4W 4.7	
R860	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R866	ERG2SJ333H	METAL OXIDE 2W 33K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C401	ECA1HM2R2B	ELECTROLYTIC 50V 2.2UF (A,B,C)	
C401	ECEA1HKAR33B	ELECTROLYTIC 50V 0.33UF (D,E,F)	
C402	ECA1CM471B	ELECTROLYTIC 16V 470UF	
C408	ECA1HGE010KB	ELECTROLYTIC 50V 1UF	
C409	ECA1VM221B	ELECTROLYTIC 35V 220UF	
C413	ECQB1H104KF	POLYESTER 50V 0.1UF (A,B,C)	
C413	ECQB1104JF3	POLYESTER 200V 0.10UF (D,E,F)	
C414	ECA1EM102E	ELECTROLYTIC 25V 1000UF (A,B,C)	
C414	ECA1EM222B	ELECTROLYTIC 25V 2200UF (D,E,F)	
C418	ECA1VM331B	ELECTROLYTIC 35V 330UF (A,B,C)	
C418	ECA1VM471B	ELECTROLYTIC 35V 470UF (D,E,F)	
C458	ECQB1H103KF3	POLYESTER 50V 0.01UF	
C460	ECA1HM010B	ELECTROLYTIC 50V 1UF (D,E,F)	
C510	ECKR2H102KB5	CERAMIC 500V 1000PF (A,B,C)	
C510	ECKR2H681KB5	CERAMIC 500V 680PF (D,E,F)	
C513	ECA1VM470B	ELECTROLYTIC 35V 47UF	
C521	ECA1HM100B	ELECTROLYTIC 50V 10UF	
C523	ECA1HM100B	ELECTROLYTIC 50V 10UF	
C524	ECKR3D222KBP	CERAMIC 2KV 2200PF (D,E,F)	⚠
C524	ECKW3D222KBP	CERAMIC 2KV 2200PF (D,E,F)	⚠
C525	ECKR3D152KBP	CERAMIC 2KV 1500PF (D,E,F)	⚠
C525	ECKW3D152KBP	CERAMIC 2KV 1500PF (D,E,F)	⚠
C526	ECQB1H473KF3	POLYESTER 50V 0.047UF (D,E,F)	
C541	ECEA1CKN220I	ELECTROLYTIC 16V 22UF	
C552	ECWH16123JVB	POLYESTER 1250V 0.012UF (D,E,F)	
C554	ECQF4333JZH	POLYESTER 630V 0.033UF (D,E,F)	
C555	ECWH16912JVB	POLYESTER 1250V 0.091UF (A,B,C)	⚠
C555	F0A3C912A002	POLYESTER 1250V 0.091UF (A,B,C)	⚠
C555	LSCFN12912JB	POLYESTER 1250V 0.091UF (A,B,C)	⚠
C555	ECWH20332JVB	POLYESTER 1250V 3300P (D,E,F)	⚠
C556	ECWF2244JBB	POLYESTER 250V 0.24UF (A,B,C)	
C556	ECWF2394JSB	POLYESTER 250V 0.39UF (D,E,F)	
C558	ECA1VM331B	ELECTROLYTIC 35V 330UF (A,B,C)	
C558	ECA1VM102B	ELECTROLYTIC 35V 1000UF (D,E,F)	
C560	ECA2EM100B	ELECTROLYTIC 250V 10UF	⚠
C561	ECA1HM4R7B	ELECTROLYTIC 50V 4.7UF	
C562	ECA1HM2R2B	ELECTROLYTIC 50V 2.2UF (D,E,F)	
C563	ECKR2H681KB5	CERAMIC 500V 680PF	
C564	ECKW3D561KBP	CERAMIC 2KV 560PF (D,E,F)	
C571	ECA1CM101B	ELECTROLYTIC 16V 100UF	
C575	F2A2D3300010	ELECTROLYTIC 200V 33UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C576	ECKW3D681KBP	CERAMIC 2KV 680PF (A,B,C)	⚠
C576	ECKC3D681KBP	CERAMIC 2KV 680PF (A,B,C)	⚠
C703	ECQE1685KFB	POLYESTER 100V 0.68UF (D,E,F)	
C704	ECQE2474KFB	POLYESTER 250V 0.47 (D,E,F)	
C801	F0CAF104A021	POLYESTER 125V 0.1UF	⚠
C803	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C803	ECKETS103MF	CERAMIC 125V 0.01UF	⚠
C803	VCKST3G103MY	CERAMIC 250V 0.01UF	⚠
C803	VCKSU3D103MY	CERAMIC 125V 0.01UF	⚠
C806	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C807	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C808	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C809	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C855	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C856	ECJ2VB1H471K	C CHIP 50V 470PF	
C857	VCESAS2D331E	ELECTROLYTIC 200V 330UF (A,B,C)	⚠
C857	ECEC2DP331BB	ELECTROLYTIC 200V 330UF (A,B,C)	⚠
C857	F2A2D3310002	ELECTROLYTIC 200V 330UF (A,B,C)	⚠
C857	F2B2D3310013	ELECTROLYTIC 200V 330UF (A,B,C)	⚠
C857	VCESAS2D561E	ELECTROLYTIC 200V 560UF (D,E,F)	⚠
C857	ECEC2DP561BB	ELECTROLYTIC 200V 560UF (D,E,F)	⚠
C857	F2B2D5610011	ELECTROLYTIC 200V 560UF (D,E,F)	⚠
C857	VCESAY2D561E	ELECTROLYTIC 200V 560UF (D,E,F)	⚠
C858	F1B3D152A010	CERAMIC 2KV 1500PF	
C859	ECJ2VB1H221K	C CHIP 50V 220P	
C861	ECKATS152ME	CERAMIC 250V 1500PF	⚠
C861	ECKETS152ME	CERAMIC 250V 1500PF	⚠
C861	VCKST4D152MX	CERAMIC 250V 1500PF	⚠
C861	VCKST5D152MX	CERAMIC 250V 1500PF	⚠
C861	VCKSU5D152MX	CERAMIC 250V 1500PF	⚠
C861	VCKSU4D152MX	CERAMIC 250V 1500PF	⚠
C864	F1B3A102A009	CERAMIC 25V 1000PF	
C865	ECA1EM471B	ELECTROLYTIC 25V 470UF	
C867	VCESAS2D331E	ELECTROLYTIC 200V 330UF	⚠
C867	ECEC2DP331BB	ELECTROLYTIC 200V 330UF	⚠
C867	F2A2D3310002	ELECTROLYTIC 200V 330UF	⚠
C867	F2B2D3310013	ELECTROLYTIC 200V 330UF	⚠
C868	ECA1EM471B	ELECTROLYTIC 25V 470UF	
C869	ECKR2H221KB5	CERAMIC 500V 220PF	
C870	ECA2DHG4R7B	ELECTROLYTIC 200V 4.7UF	
C872	ECEA2DU820YE	ELECTROLYTIC 200V 82UF	⚠
C872	F2A2D8200001	ELECTROLYTIC 200V 82UF	⚠
C872	F2A2D8200003	ELECTROLYTIC 200V 82UF	⚠
C872	VCESR2D820XE	ELECTROLYTIC 200V 82UF	⚠

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L551	ELH5L6141	COIL (D,E,F)	⚠
L552	J0JKA0000015	COIL	
L554	ELH5L4149	COIL (A,B,C)	⚠
L554	G0D790000001	COIL (A,B,C)	⚠
L554	ELH5L8106	COIL (D,E,F)	⚠
L701	ELC18B471L	COIL 470UH (D,E,F)	
L704	LSLQA10R682J	COIL 6800UH (D,E,F)	
L801	G0B452H00001	LINE FILTER	⚠
L801	ELF21V025A	LINE FILTER	⚠
L801	J0HBLH000001	LINE FILTER	⚠
L802	G0B452H00001	LINE FILTER	⚠
L802	ELF21V025A	LINE FILTER	⚠
L802	J0HBLH000001	LINE FILTER	⚠
L850	J0JKA0000016	FERRITE BEAD WITH LEAD	
L855	VLQSAB7D100K	COIL 10UH	
L856	VLQSAB7D220K	COIL 22UH	
L857	J0JHB0000021	FILTER	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P501	K1MN19A00037	CONNECTOR 19P	
P503	K1MP06A00004	CONNECTOR 6P (D,E,F)	
P504	K1MP04A00013	CONNECTOR 4P (A,B,C)	
P801	LSJP0814	CONNECTOR 2P	
P802	VEKS5825	CONNECTOR CABLE W/PLUG	
P850	K1KA02A00229	CONNECTOR 2P	
TP802	VEKS5883	CONNECTOR CABLE W/PLUG	

FUSE & PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
F801	K5D632AQ0002	FUSE 125V 6.3A	⚠
F801	K5D632ADA001	FUSE 125V 6.3A	⚠
F801	K5D632AD0002	FUSE 125V 6.3A	⚠
PR850	LSSF009A70E	IC PROTECTOR 7A	⚠

RELAY

Ref. No.	Part No.	Part Name & Description	Remarks
RL591	LSSY0004	RELAY	⚠
RL591	K6B1AGA00034	RELAY	⚠
RL591	K6B1AGA00042	RELAY	⚠
RL591	TSEH0013	RELAY	⚠
RL591	TSEH1860-1	RELAY	⚠
RL801	LSSY0004	RELAY	⚠
RL801	K6B1AGA00034	RELAY	⚠
RL801	K6B1AGA00042	RELAY	⚠
RL801	TSEH0013	RELAY	⚠
RL801	TSEH1860-1	RELAY	⚠

TRANSFORMER

Ref. No.	Part No.	Part Name & Description	Remarks
T501	ETH09K8AZ	TRANSFORMER (A,B,C)	
T501	ETH19Y70AY	TRANSFORMER (D,E,F)	
T551	G4G5K0000001	TRANSFORMER (A,B,C)	⚠
T551	G4G6L0000003	TRANSFORMER (D,E,F)	⚠
T850	LSTP0124	TRANSFORMER (A,B,C)	⚠
T850	ETS35AA6S5ND	TRANSFORMER (D,E,F)	⚠

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E31	LSEP2075A	DEFLECTION C.B.A. (D,E,F)	RTL

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
470	XTV3+10G	TAPPING SCREW,STEEL	
483	XYN3+F10S	SCREW W/WASHER,STEEL	
728	LUS63008A	HEAT SINK (A,B,C)	
728	LSSC0254	HEAT SINK (D,E,F)	
751	LML69001A	ANODE LEAD CLAMPER	
760	TUC77628	HEAT SINK	
771	EYF52BC	FUSE HOLDER	
797	LSSC0529	HEAT SINK (A,B,C)	
797	LSSC0562	HEAT SINK (D,E,F)	

12.3.5. DEFLECTION C.B.A.

(Models: D, E, F)

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
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INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC752	C0ABAA000005	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q751	2SD14990P0LB	TRANSISTOR SI NPN	
Q751	2SD14990Q0LB	TRANSISTOR SI NPN	
Q753	2SA1309ARA	TRANSISTOR SI PNP	
Q753	2SA1309ARA	TRANSISTOR SI PNP	
Q753	2SA1309ASA	TRANSISTOR SI PNP	
Q754	2SC3311ARA	TRANSISTOR SI NPN	
Q754	2SC3311ARA	TRANSISTOR SI NPN	
Q754	2SC3311ASA	TRANSISTOR SI NPN	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D704	MA2C029TAF	DIODE SI	
D752	MA2C165001VT	DIODE SI	
D752	B0AACK000004	DIODE SI	
D752	1SS119	DIODE SI	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R713	ERDS2TJ471	CARBON 1/4W 470	
R714	ERDS2TJ272	CARBON 1/4W 2.7K	
R751	ERDS2TJ101	CARBON 1/4W 100	
R752	ERJ6GEYJ181V	MGF CHIP 1/10W 180	
R753	EVMEGSA00B14	VARIABLE 10K	
R755	ERDS2TJ101	CARBON 1/4W 100	
R756	ERDS2TJ152	CARBON 1/4W 1.5K	
R757	ERJ6GEYJ752V	MGF CHIP 1/10W 7.5K	
R758	ERJ6GEYJ823V	MGF CHIP 1/10W 82K	
R759	ERJ6GEYJ683V	MGF CHIP 1/10W 68K	
R760	ERJ6GEYJ474V	MGF CHIP 1/10W 470K	
R761	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R762	ERJ6GEYJ123V	MGF CHIP 1/10W 12K	
R763	EVMEGSA00B14	VARIABLE 10K	
R764	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R765	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R766	EVMEGSA00B14	VARIABLE 10K	
R767	ERJ6GEYJ123V	MGF CHIP 1/10W 12K	
R768	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R769	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R771	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R772	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R773	ERJ6GEYJ823V	MGF CHIP 1/10W 82K	
R774	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R775	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R776	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R777	ERJ6GEYJ154V	MGF CHIP 1/10W 150K	
R779	ERJ6GEYJ124V	MGF CHIP 1/10W 120K	
R791	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R792	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R793	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R794	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R795	ERJ6GEYJ393V	MGF CHIP 1/10W 39K	
R796	ERJ6GEYJ154V	MGF CHIP 1/10W 150K	
R797	ERJ6GEYJ154V	MGF CHIP 1/10W 150K	
R798	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R799	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C761	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C762	ECA1CM100B	ELECTROLYTIC 16V 10UF	
C763	VCUSTBC224KB	C CHIP 16V 0.22UF	
C764	ECJ2VB1H102K	C CHIP 50V 1000PF	
C765	ECEA1HKAR33B	ELECTROLYTIC 50V 0.33UF	
C767	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C768	ECJ2VB1H392K	C CHIP 50V 3900PF	
C792	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C793	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C794	ECA1VM470B	ELECTROLYTIC 35V 47UF	
C795	ECA1EM471B	ELECTROLYTIC 25V 470UF	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P504	VJHS0297	PACK PIN 7P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
483	XYN3+F10S	SCREW W/WASHER,STEEL	
713	VMAS1912	P.C.B. SUPPORT ANGLE	
794	TUC15776	HEAT SINK PLATE	

12.3.6. POWER SUPPLY C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC1001	C5HABZZ00101	IC, LINEAR	⚠
IC1002	CNC1S101R1KT	IC, LINEAR	⚠
IC1002	CNC1S101S1KT	IC, LINEAR	⚠
IC1003	C0DAEMZ00005	IC, LINEAR	
IC1003	B1AZKD000001	IC, LINEAR	
IC1003	C0DAEMZ00001	IC, LINEAR	
IC1004	C0DAEGG00008	IC, LINEAR	
IC9501	C0ABBB000256	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q1001	B1BACC000010	TRANSISTOR SI NPN CHIP	
Q1001	2SD1581-T	TRANSISTOR SI NPN CHIP	
Q1002	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1002	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1004	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q1004	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q1006	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q1006	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q1007	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q1007	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q1008	UNR221100L	TRANSISTOR SI NPN CHIP	
Q1008	DTC114EK-TX	TRANSISTOR SI NPN CHIP	
Q1009	B1BACC000010	TRANSISTOR SI NPN CHIP	
Q1009	2SD1581-T	TRANSISTOR SI NPN CHIP	
Q1010	2SD2396K	TRANSISTOR SI NPN CHIP	
Q1011	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1011	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1012	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1012	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1013	B1BACC000010	TRANSISTOR SI NPN CHIP	
Q1013	2SD1581-T	TRANSISTOR SI NPN CHIP	
Q1014	2SD235800A	TRANSISTOR SI NPN CHIP	
Q1014	B1AAQB000002	TRANSISTOR SI NPN CHIP	
Q1015	2SD0601AHL	TRANSISTOR SI NPN CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
Q1015	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q7021	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q7021	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q7031	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q7031	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q9501	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q9501	B1ABCF000020	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D1001	B0AAKT000010	DIODE SI	⚠
D1001	B0EAKT000027	DIODE SI	⚠
D1001	B0EAKT000030	DIODE SI	⚠
D1002	B0AAML000001	DIODE SI	
D1002	B0EAKL000008	DIODE SI	
D1003	B0AAKT000010	DIODE SI	⚠
D1003	B0EAKT000027	DIODE SI	⚠
D1003	B0EAKT000030	DIODE SI	⚠
D1004	B0AAKT000010	DIODE SI	⚠
D1004	B0EAKT000027	DIODE SI	⚠
D1004	B0EAKT000030	DIODE SI	⚠
D1005	B0AAKT000010	DIODE SI	⚠
D1005	B0EAKT000027	DIODE SI	⚠
D1005	B0EAKT000030	DIODE SI	⚠
D1006	B0JAMD000012	DIODE SI	
D1006	B0JAGE000001	DIODE SI	
D1006	B0JAME000082	DIODE SI	
D1007	B0HAJL000001	DIODE SI	
D1007	B0HAGP000012	DIODE SI	
D1008	B0HAJL000001	DIODE SI	
D1008	B0HAGP000012	DIODE SI	
D1009	B0HAJL000001	DIODE SI	
D1009	B0HAGP000012	DIODE SI	
D1010	B0HAJL000001	DIODE SI	
D1010	B0HAGP000012	DIODE SI	
D1011	B0HAHP000014	DIODE SI	
D1011	B0HAJP000007	DIODE SI	
D1011	B0HAMP000061	DIODE SI	
D1011	B0HAMP000069	DIODE SI	
D1012	B0JANK000004	DIODE SI	
D1013	B0JBRD000006	DIODE SI	
D1014	B0JANG000006	DIODE SI	
D1015	B0JAME000079	DIODE SI	
D1015	B0JAME000049	DIODE SI	
D1015	B0JANE000011	DIODE SI	
D1015	B0JANE000022	DIODE SI	
D1016	B0AAML000001	DIODE SI	
D1016	B0EAKL000008	DIODE SI	
D1017	B0HAHP000014	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D1017	B0HAJP000007	DIODE SI	
D1017	B0HAMP000061	DIODE SI	
D1017	B0HAMP000069	DIODE SI	
D1019	MAZ4110NHF	DIODE ZENER 11V	
D1020	B0AAML000001	DIODE SI	
D1020	1SR139-400	DIODE SI	
D1021	B0AAML000001	DIODE SI	
D1021	1SR139-400	DIODE SI	
D1022	B0AAML000001	DIODE SI	
D1022	1SR139-400	DIODE SI	
D1023	MAZ4047NMF	DIODE ZENER 4.7V	
D1024	MA4051N-HTA	DIODE ZENER 5.1V	
D1025	MAZ4100NHF	DIODE ZENER 10V	
D1025	RD10JSAB3	DIODE ZENER 10V	
D1026	MA2C165001VT	DIODE SI	
D1026	B0AACK000004	DIODE SI	
D1026	1SS119	DIODE SI	
D1027	MA2C165001VT	DIODE SI	
D1027	B0AACK000004	DIODE SI	
D1027	1SS119	DIODE SI	
D1030	B0AAML000001	DIODE SI	
D1030	B0EAKL000008	DIODE SI	
D1040	B0HAML000014	DIODE SI	
D1040	B0HAMM000105	DIODE SI	
D1041	MAZ22000A	DIODE ZENER 20V	⚠
D9503	MA2C165001VT	DIODE SI	
D9503	B0AACK000004	DIODE SI	
D9503	1SS119	DIODE SI	
D9504	MA2C165001VT	DIODE SI	
D9504	B0AACK000004	DIODE SI	
D9504	1SS119	DIODE SI	
D9505	MAZ40510MF	DIODE ZENER 5.1V	
D9505	HZS5C2TD	DIODE ZENER 5.1V	
D9505	HZS5C3TD	DIODE ZENER 5.1V	
D9506	MAZ40510MF	DIODE ZENER 5.1V	
D9506	HZS5C2TD	DIODE ZENER 5.1V	
D9506	HZS5C3TD	DIODE ZENER 5.1V	
D9507	MA2C165001VT	DIODE SI	
D9507	B0AACK000004	DIODE SI	
D9507	1SS119	DIODE SI	
D9508	MA2C165001VT	DIODE SI	
D9508	B0AACK000004	DIODE SI	
D9508	1SS119	DIODE SI	
D9509	MAZ41200LF	DIODE ZENER 12V	
D9510	MAZ41200LF	DIODE ZENER 12V	
D9511	MAZ41200LF	DIODE ZENER 12V	
D9512	MAZ41200LF	DIODE ZENER 12V	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R1001	ERDS2TJ153	CARBON 1/4W 15K	
R1002	D0AF473JA038	CARBON 1/2W 47K	
R1003	ERD2FCG681V	FUSE 1/4W 680	⚠
R1004	ERX2SJR22P	CARBON 2W 0.22	
R1006	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R1008	ERJ6GEYJ202V	MGF CHIP 1/10W 2K	
R1009	ERG2SJ104P	METAL OXIDE 2W 100K	
R1011	ERDS2TJ330T	CARBON 1/4W 33	
R1012	ERDS2TJ153	CARBON 1/4W 15K	
R1013	ERD25FJ100P	CARBON 1/4W 10	⚠
R1013	ERD25FPJ100P	CARBON 1/4W 10	⚠
R1013	VRESF4FJ100P	CARBON 1/4W 10	⚠
R1014	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R1015	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R1016	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1017	D1BD2431A016	MGF CHIP 1/10W 2.43K	
R1018	D0HD222ZA002	MGF CHIP 1/10W 2.2K	
R1019	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R1020	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1021	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R1022	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1023	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1024	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R1025	ERDS2TJ822	CARBON 1/4W 8.2K	
R1026	ERDS1TJ182T	CARBON 1/2W 1.8K	
R1027	ERDS1TJ182T	CARBON 1/2W 1.8K	
R1028	ERDS2TJ153	CARBON 1/4W 15K	
R1029	ERDS2TJ331	CARBON 1/4W 330	
R1030	ERDS2TJ153	CARBON 1/4W 15K	
R1031	ERDS2T0T	CARBON 1/4W 0	
R1032	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R1033	ERDS2TJ153	CARBON 1/4W 15K	
R1034	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R1035	ERDS2TJ153	CARBON 1/4W 15K	
R1037	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1038	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1039	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R1603	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R7001	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7002	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R7003	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R7021	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R7022	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R7023	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R7033	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R9501	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R9502	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R9503	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R9504	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R9505	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R9506	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R9507	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R9508	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C1001	ECKDRS101MBY	CERAMIC 125V 100PF	⚠
C1001	ECKATS101MB	CERAMIC 125V 100PF	⚠
C1001	ECKETS101MB	CERAMIC 125V 100PF	⚠
C1001	ECKMRS101MBY	CERAMIC 125V 100PF	⚠
C1001	VCKSTJG101KW	CERAMIC 125V 100PF	⚠
C1001	VCKSTLG101KW	CERAMIC 125V 100PF	⚠
C1001	VCKSUJD101KW	CERAMIC 125V 100PF	⚠
C1001	VCKSULD101KW	CERAMIC 125V 100PF	⚠
C1002	ECKDRS101MBY	CERAMIC 125V 100PF	⚠
C1002	ECKATS101MB	CERAMIC 125V 100PF	⚠
C1002	ECKETS101MB	CERAMIC 125V 100PF	⚠
C1002	ECKMRS101MBY	CERAMIC 125V 100PF	⚠
C1002	VCKSTJG101KW	CERAMIC 125V 100PF	⚠
C1002	VCKSTLG101KW	CERAMIC 125V 100PF	⚠
C1002	VCKSUJD101KW	CERAMIC 125V 100PF	⚠
C1002	VCKSULD101KW	CERAMIC 125V 100PF	⚠
C1003	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C1003	ECKETS103MF	CERAMIC 125V 0.01UF	⚠
C1003	VCKST3G103MY	CERAMIC 250V 0.01UF	⚠
C1003	VCKSU3D103MY	CERAMIC 125V 0.01UF	⚠
C1004	ECKATS332ME8	CERAMIC 250V 3300PF	⚠
C1004	ECKDNB332ME8	CERAMIC 250V 3300PF	⚠
C1004	ECKETS332ME8	CERAMIC 250V 3300PF	⚠
C1004	VCKST3G332MX	CERAMIC 250V 3300PF	⚠
C1004	VCKSU3D332MX	CERAMIC 250V 3300PF	⚠
C1005	ECKATS152ME	CERAMIC 250V 1500PF	⚠
C1005	ECKETS152ME	CERAMIC 250V 1500PF	⚠
C1005	VCKST4D152MX	CERAMIC 250V 1500PF	⚠
C1005	VCKST5D152MX	CERAMIC 250V 1500PF	⚠
C1005	VCKSU5D152MX	CERAMIC 250V 1500PF	⚠
C1005	VCKSU4D152MX	CERAMIC 250V 1500PF	⚠
C1006	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C1007	ECJ2VC1H471J	C CHIP 50V 470PF	
C1008	ECEA2DU121YE	ELECTROLYTIC 200V 120UF	⚠
C1008	F2A2D1210001	ELECTROLYTIC 200V 120UF	⚠
C1008	F2A2D1210003	ELECTROLYTIC 200V 120UF	⚠
C1008	VCESR2D121EX	ELECTROLYTIC 200V 120UF	⚠
C1009	F1B3D471A011	CERAMIC 2KV 470PF	
C1010	ECKR2H221KB5	CERAMIC 500V 220PF	

Ref. No.	Part No.	Part Name & Description	Remarks
C1011	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1012	ECA2DHG4R7B	ELECTROLYTIC 200V 4.7UF	
C1013	ECJ2VB1H561K	C CHIP 50V 560PF	
C1022	ECA1HM100B	ELECTROLYTIC 50V 10UF	
C1023	ECJ2VC1H101J	C CHIP 50V 100PF	
C1024	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1025	EEUFF1E471B	ELECTROLYTIC 25V 470UF	
C1026	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C1027	EEUFF0J222E	ELECTROLYTIC 6.3V 2200UF	
C1028	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1030	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C1033	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1034	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1035	ECA1EM331B	ELECTROLYTIC 25V 330UF	
C1037	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1039	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1040	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1041	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1043	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C1045	ECJ2YB1C334K	C CHIP 16V 0.33UF	
C1046	ECA1HM100B	ELECTROLYTIC 50V 10UF	
C1049	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1050	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1051	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C1052	ECA0JM101B	ELECTROLYTIC 6.3V 100UF	
C1054	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1056	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1057	ECEA0JEE101B	ELECTROLYTIC 6.3V 100UF	
C1059	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1060	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1061	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1062	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1063	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1064	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1065	ECA1CM470B	ELECTROLYTIC 16V 47UF	
C1066	ECA1CM331B	ELECTROLYTIC 16V 330UF	
C1067	ECJ2FB1C105K	C CHIP 16V 1UF	
C1069	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1070	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1071	ECJ2YB1H104K	C CHIP 50V 0.1UF	
C1601	ECJ2VC1H270J	C CHIP 50V 27PF	
C1602	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1603	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C7001	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C7002	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C7006	ECJ2VC1H390J	C CHIP 50V 39PF	
C7007	ECJ2VC1H220J	C CHIP 50V 22PF	
C7008	ECJ2VB1H102K	C CHIP 50V 1000PF	
C7011	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C7021	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C7022	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C7032	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C7033	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9502	ECEA1CKA100	ELECTROLYTIC 16V 10UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C9504	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9505	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9506	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9509	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9510	ECEA1CKA100	ELECTROLYTIC 16V 10UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L1001	G0B183E00002	LINE FILTER 0.5A 18MH	⚠
L1001	ELF15N005A	LINE FILTER 0.5A 18MH	⚠
L1001	J0HBLG000001	LINE FILTER 0.5A 18MH	⚠
L1002	J0JHB0000021	FILTER	
L1003	J0JHB0000021	FILTER	
L1004	VLQSAB7D100K	COIL 10UH	
L1005	G0A100H00014	COIL 10UH	
L1006	G0A9R0H00002	COIL 9UH	
L1007	ELEXT101KE04	COIL 100UH	
L1008	VLQSAB7D220K	COIL 22UH	
L1011	G0A9R0H00002	COIL 9UH	
L1014	EXCELDR25V	COIL	
L1015	EXCELDR25V	COIL	
L1601	LSLF0035	EMI FILTER CHIP	
L1602	LSLF0035	EMI FILTER CHIP	
L1603	ELESN220KA	COIL 22UH	
L7001	VLQSAB7D100K	COIL 10UH	
L7002	ELEXT101KE04	COIL 100UH	
L9501	ELESN101KA	COIL 100UH	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P1001	VEKS5897	CONNECTOR CABLE W/PLUG	
P1002	VEKS5896-FE	CONNECTOR CABLE W/PLUG	
P1006	LSJP0814	CONNECTOR 2P	
P7002	K1MN13A00049	CONNECTOR 13P	
P9501	K1MN13A00049	CONNECTOR 13P	

FUSE & PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
F1001	K5D302AQ0003	FUSE 125V 3A	⚠
F1001	K5D302ADA002	FUSE 125V 3A	⚠
F1001	K5D302AD0002	FUSE 125V 3A	⚠
PR1003	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1003	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1003	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1004	LSSF009A35E	IC PROTECTOR 3.5A	⚠
PR1005	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1005	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1005	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1007	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1007	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1007	LSSF009A25E	IC PROTECTOR 1.5A	⚠

TRANSFORMER

Ref. No.	Part No.	Part Name & Description	Remarks
T1001	LSTP0125	TRANSFORMER	⚠

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK1601	B3RAE0000029	IC, JACK OPTICAL OUTPUT	
JK9501	K2HA203B0011	AUDIO/VIDEO JACK SOCKET	
JK9502	K2HA305B0003	AUDIO/VIDEO JACK SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
483	XYN3+F10S	SCREW W/WASHER,STEEL	
712	VMTS0035	CUSHION,RUBBER	
743	J3AAABB00001	TUNER,UHF/VHF NR	
771	EYF52BC	FUSE HOLDER	
772	LSSC0680	HEAT SINK	

12.3.7. OPERATION C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC4701	C0ABBB000256	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q4701	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q4701	B1ABCF000020	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D4591	MAZ42400MF	DIODE ZENER 24V	
D4592	MAZ42400MF	DIODE ZENER 24V	
D4593	MAZ42400MF	DIODE ZENER 24V	
D4594	MAZ42400MF	DIODE ZENER 24V	
D4706	MA2C165001VT	DIODE SI	
D4706	B0AACK000004	DIODE SI	
D4706	1SS119	DIODE SI	
D4707	MA2C165001VT	DIODE SI	
D4707	B0AACK000004	DIODE SI	
D4707	1SS119	DIODE SI	
D4710	MAZ40510MF	DIODE ZENER 5.1V	
D4710	HZS5C2TD	DIODE ZENER 5.1V	
D4710	HZS5C3TD	DIODE ZENER 5.1V	
D4711	MAZ40510MF	DIODE ZENER 5.1V	
D4711	HZS5C2TD	DIODE ZENER 5.1V	
D4711	HZS5C3TD	DIODE ZENER 5.1V	
D4715	MA2C165001VT	DIODE SI	
D4715	B0AACK000004	DIODE SI	
D4715	1SS119	DIODE SI	
D4716	MA2C165001VT	DIODE SI	
D4716	B0AACK000004	DIODE SI	
D4716	1SS119	DIODE SI	
D4717	MA2C165001VT	DIODE SI	
D4717	B0AACK000004	DIODE SI	
D4717	1SS119	DIODE SI	
D4718	MA2C165001VT	DIODE SI	
D4718	B0AACK000004	DIODE SI	
D4718	1SS119	DIODE SI	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R4591	ERDS2TJ681	CARBON 1/4W 680	
R4592	ERDS2TJ681	CARBON 1/4W 680	
R4593	ERDS2TJ681	CARBON 1/4W 680	
R4594	ERDS2TJ681	CARBON 1/4W 680	
R4701	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4702	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4703	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4704	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4705	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4706	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4707	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4710	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R6381	ERJ6ENF5601V	MGF CHIP 1/10W 5.6K	
R6382	ERJ6ENF1102V	MGF CHIP 1/10W 11K	
R6383	ERJ6ENF3302	MGF CHIP 1/10W 33K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C4701	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4702	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4703	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4704	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4707	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4708	ECEA1CKA100	ELECTROLYTIC 16V 10UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L4701	ELESN101KA	COIL 100UH	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P4591	K1KA05A00177	CONNECTOR 5P	
P4701	K1MN13A00049	CONNECTOR 13P	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6381	EVQ21405R	SWITCH PUSH	
SW6382	EVQ21405R	SWITCH PUSH	
SW6383	EVQ21405R	SWITCH PUSH	
SW6384	EVQ21405R	SWITCH PUSH	

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK4591	K2HC103B0047	EARPHONE JACK SOCKET	
JK4702	LSJJ0168	FRONT AUDIO/VIDEO JACK SOCKET	

12.3.8. CRT C.B.A.

(Models: A, B, C)

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
---------	G
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TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q351	2SC3063000RL	TRANSISTOR SI NPN	
Q351	B1BAAN000034	TRANSISTOR SI NPN	
Q351	B1BAAN000035	TRANSISTOR SI NPN	
Q352	2SC3063000RL	TRANSISTOR SI NPN	
Q352	B1BAAN000034	TRANSISTOR SI NPN	
Q352	B1BAAN000035	TRANSISTOR SI NPN	
Q353	2SC3063000RL	TRANSISTOR SI NPN	
Q353	B1BAAN000034	TRANSISTOR SI NPN	
Q353	B1BAAN000035	TRANSISTOR SI NPN	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D351	MAZ41500MF	DIODE ZENER 15V	
D351	B0BA01400041	DIODE ZENER 15V	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R351	ERG2ANJ153H	METAL OXIDE 2W 15K	
R352	ERG2ANJ153H	METAL OXIDE 2W 15K	
R353	ERG2ANJ153H	METAL OXIDE 2W 15K	
R354	ERD25TJ272	CARBON 1/4W 2.7K	
R355	ERD25TJ272	CARBON 1/4W 2.7K	
R356	ERD25TJ272	CARBON 1/4W 2.7K	
R357	ERDS2TJ392	CARBON 1/4W 3.9K	
R358	ERDS2TJ392	CARBON 1/4W 3.9K	
R359	ERDS2TJ392	CARBON 1/4W 3.9K	
R360	ERDS2TJ391	CARBON 1/4W 390	
R361	ERDS2TJ391	CARBON 1/4W 390	
R362	ERDS2TJ391	CARBON 1/4W 390	
R363	ERDS2TJ121	CARBON 1/4W 120	
R364	ERDS2TJ121	CARBON 1/4W 120	
R365	ERDS2TJ121	CARBON 1/4W 120	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C351	F1D1H471A012	CERAMIC 50V 470PF	
C352	F1D1H471A012	CERAMIC 50V 470PF	
C353	F1D1H561A012	CERAMIC 50V 560PF	
C354	F1B3D1020008	CERAMIC 2KV 1000PF	
C357	ECA1CM220B	ELECTROLYTIC 16V 22UF	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P351	LSJWR4N350AC	CONNECTOR CABLE W/OUT PLUG	
P352	LSJWS4N380AC	CONNECTOR CABLE W/OUT PLUG	
P353	K3B09CA00005	CRT SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
153	TMM7443-1	CLAMPER	

12.3.9. CRT C.B.A.

(Models: D, E, F)

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
---------	G
---------	H
---------	I

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q351	2SC3063000RL	TRANSISTOR SI NPN	
Q351	B1BAAN000034	TRANSISTOR SI NPN	
Q351	B1BAAN000035	TRANSISTOR SI NPN	
Q352	2SC3063000RL	TRANSISTOR SI NPN	
Q352	B1BAAN000034	TRANSISTOR SI NPN	
Q352	B1BAAN000035	TRANSISTOR SI NPN	
Q353	2SC3063000RL	TRANSISTOR SI NPN	
Q353	B1BAAN000034	TRANSISTOR SI NPN	
Q353	B1BAAN000035	TRANSISTOR SI NPN	
Q354	2SC3311AHA	TRANSISTOR SI PNP CHIP	
Q355	2SC3311AHA	TRANSISTOR SI PNP CHIP	
Q356	2SC3311AHA	TRANSISTOR SI PNP CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D351	MAZ41500MF	DIODE ZENER 15V	
D351	B0BA01400041	DIODE ZENER 15V	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R351	ERG2ANJ153H	METAL OXIDE 2W 15K	
R352	ERG2ANJ153H	METAL OXIDE 2W 15K	
R353	ERG2ANJ153H	METAL OXIDE 2W 15K	
R354	ERD25TJ272	CARBON 1/4W 2.7K	
R355	ERD25TJ272	CARBON 1/4W 2.7K	
R356	ERD25TJ272	CARBON 1/4W 2.7K	
R357	ERDS2TJ332	CARBON 1/4W 3.3K	
R358	ERDS2TJ332	CARBON 1/4W 3.3K	
R359	ERDS2TJ332	CARBON 1/4W 3.3K	
R360	ERDS2TJ331	CARBON 1/4W 330	
R361	ERDS2TJ331	CARBON 1/4W 330	
R362	ERDS2TJ331	CARBON 1/4W 330	
R363	ERDS2TJ101	CARBON 1/4W 100	
R364	ERDS2TJ101	CARBON 1/4W 100	
R365	ERDS2TJ101	CARBON 1/4W 100	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C351	F1D1H471A012	CERAMIC 50V 470PF	
C352	F1D1H471A012	CERAMIC 50V 470PF	
C353	F1D1H471A012	CERAMIC 50V 470PF	
C354	F1B3D1020008	CERAMIC 2KV 1000PF	
C357	ECA1CM220B	ELECTROLYTIC 16V 22UF	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P351	LSJWR4N410AC	CONNECTOR CABLE W/OUT PLUG	
P352	LSJWS6N410AC	CONNECTOR CABLE W/OUT PLUG	
P355	K3B01YZ00001	CONNECTOR 1P	
P360	K3B09CA00005	CRT SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
273	TMM7464-1	CLAMPER	

12.3.10. DVD MAIN C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC8001	MN2DS03VP1H	IC, SYSTEM LSI	E.S.D. MKI
IC8002	LSSK0039	IC, 16M FLASH MEMORY	E.S.D. MKI
IC8003	C3ABPG000133	IC, 64M D RAM	E.S.D. MKI
IC8003	C3ABPG000067	IC, 64M D RAM	E.S.D. MKI
IC8003	C3ABPG000102	IC, 64M D RAM	E.S.D. MKI
IC8003	C3ABPG000135	IC, 64M D RAM	E.S.D. MKI
IC8004	LSUQ0062	IC, 4K EEP ROM	E.S.D. MKI
IC8005	C0DBEZG00017	IC, LIENAR	MKI
IC8501	C0FBBK000035	IC, LINEAR	MKI
IC8503	C0ABBB000256	IC, LINEAR	MKI
IC8801	C0GBL0000003	IC, LINEAR	MKI

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q8401	2SB1218ARL	TRANSISTOR SI PNP CHIP	MKI
Q8402	2SB1218ARL	TRANSISTOR SI PNP CHIP	MKI
Q8403	2SB1218ARL	TRANSISTOR SI PNP CHIP	MKI
Q8404	2SB1218ARL	TRANSISTOR SI PNP CHIP	MKI
Q8501	UNR511500L	TRANSISTOR COMPLX CMP SI NPN CHIP	MKI
Q8501	B1GDCFJJ0025	TRANSISTOR COMPLX CMP SI NPN CHIP	MKI
Q8502	UNR521500L	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8502	B1GBCFJA0006	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8503	UNR521500L	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8503	B1GBCFJA0006	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8504	UNR521500L	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8504	B1GBCFJA0006	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8505	UNR521500L	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8505	B1GBCFJA0006	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8901	2SD1819A0L	TRANSISTOR SI NPN CHIP	MKI
Q8901	B1ABCF000020	TRANSISTOR SI NPN CHIP	MKI
Q8902	2SD1819A0L	TRANSISTOR SI NPN CHIP	MKI
Q8902	B1ABCF000020	TRANSISTOR SI NPN CHIP	MKI
Q8903	2SB0709A0L	TRANSISTOR SI PNP CHIP	MKI
Q8903	B1ADCF000001	TRANSISTOR SI PNP CHIP	MKI
Q8904	2SB0709A0L	TRANSISTOR SI PNP CHIP	MKI
Q8904	B1ADCF000001	TRANSISTOR SI PNP CHIP	MKI
Q8905	UNR521100L	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8905	B1GBCFJJ0007	TRANSISTOR COMPLX CMP SI PNP CHIP	MKI
Q8906	UNR511500L	TRANSISTOR COMPLX CMP SI NPN CHIP	MKI
Q8906	B1GDCFJJ0025	TRANSISTOR COMPLX CMP SI NPN CHIP	MKI
Q8907	B1CFGD000002	TRANSISTOR SI NPN CHIP	MKI
Q8907	XP0187800L	TRANSISTOR SI NPN CHIP	MKI

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R8001	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8003	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8004	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	MKI
R8005	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	MKI
R8006	EXB38V820JV	ARRAY CHIP 82	MKI
R8007	EXB38V820JV	ARRAY CHIP 82	MKI
R8008	EXB38V820JV	ARRAY CHIP 82	MKI
R8009	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	MKI
R8010	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	MKI
R8011	ERJ3GEY0R00V	MGF CHIP 1/16W 0	MKI
R8015	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	MKI
R8016	ERJ3GEYJ221V	MGF CHIP 1/16W 220	MKI
R8017	ERJ3GEYJ221V	MGF CHIP 1/16W 220	MKI
R8019	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8020	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8021	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	MKI
R8023	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	MKI
R8024	EXB38V820JV	ARRAY CHIP 82	MKI
R8025	ERJ3GEYJ271V	MGF CHIP 1/16W 270	MKI
R8026	ERJ3GEYJ271V	MGF CHIP 1/16W 270	MKI
R8027	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	MKI
R8028	ERJ3GEYJ271V	MGF CHIP 1/16W 270	MKI
R8029	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8030	ERJ3GEYJ270V	MGF CHIP 1/16W 27	MKI
R8031	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	MKI
R8033	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	MKI
R8034	EXB38V820JV	ARRAY CHIP 82	MKI
R8035	EXB38V820JV	ARRAY CHIP 82	MKI
R8036	EXB38V820JV	ARRAY CHIP 82	MKI
R8037	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8038	D0HB273ZA002	MGF CHIP 1/16W 27K	MKI
R8039	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	MKI
R8040	ERJ3GEYJ330V	MGF CHIP 1/16W 33	MKI
R8041	ERA3YED221V	CARBON CHIP 1/16W 220	MKI
R8042	ERJ3GEYJ330V	MGF CHIP 1/16W 33	MKI
R8043	D0HB332ZA002	MGF CHIP 1/16W 3.3K	MKI
R8044	D0HB151ZA002	MGF CHIP 1/16W 150	MKI
R8046	ERJ3GEYJ153V	MGF CHIP 1/16W 15K	MKI
R8048	D0HB822ZA002	MGF CHIP 1/16W 8.2K	MKI
R8049	ERJ3GEYJ101V	MGF CHIP 1/16W 100	MKI
R8051	EXB38V330JV	ARRAY CHIP 33	MKI
R8052	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	MKI
R8053	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	MKI
R8054	ERJ3GEY0R00V	MGF CHIP 1/16W 0	MKI
R8055	ERJ3GEY0R00V	MGF CHIP 1/16W 0	MKI
R8056	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8057	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8058	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8059	ERJ1TYJ4R7U	MGF CHIP 1/16W 4.7K	MKI
R8060	D0HB103ZA002	MGF CHIP 1/16W 10K	MKI
R8061	D0HB202ZA002	MGF CHIP 1/16W 2K	MKI
R8065	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8	MKI
R8066	ERJ3GEYJ101V	MGF CHIP 1/16W 100	MKI
R8067	ERJ3GEYJ101V	MGF CHIP 1/16W 100	MKI

Ref. No.	Part No.	Part Name & Description	Remarks
R8068	ERJ3GEYJ101V	MGF CHIP 1/16W 100	MKI
R8401	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8402	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8403	ERA3YED102V	CARBON CHIP 1/16W 1K	MKI
R8404	ERA3YED102V	CARBON CHIP 1/16W 1K	MKI
R8405	D0HB302ZA002	MGF CHIP 1/16W 3K	MKI
R8406	D0HB302ZA002	MGF CHIP 1/16W 3K	MKI
R8409	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8410	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8418	D0HB181ZA002	MGF CHIP 1/16W 180	MKI
R8419	D0HB181ZA002	MGF CHIP 1/16W 180	MKI
R8420	ERJ3GEYJ121V	MGF CHIP 1/16W 120	MKI
R8421	ERJ3GEYJ560V	MGF CHIP 1/10W 5.6K	MKI
R8422	ERJ3GEYJ560V	MGF CHIP 1/10W 5.6K	MKI
R8423	D0HB750ZA003	MGF CHIP 1/16W 75	MKI
R8424	D0HB750ZA003	MGF CHIP 1/16W 75	MKI
R8425	ERJ3GEYJ680V	MGF CHIP 1/16W 68	MKI
R8426	ERJ3GEYJ330V	MGF CHIP 1/16W 33	MKI
R8427	ERJ3GEYJ330V	MGF CHIP 1/16W 33	MKI
R8431	ERJ6GEY0R00V	MGF CHIP 1/10W 0	MKI
R8501	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8502	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8503	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8504	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8518	ERJ3GEYF822V	MGF CHIP 1/16W 8.2K	MKI
R8520	ERJ3GEYF822V	MGF CHIP 1/16W 8.2K	MKI
R8533	ERJ3GEYF163V	MGF CHIP 1/16W 16K	MKI
R8534	ERJ3GEYJ622V	MGF CHIP 1/16W 6.2K	MKI
R8535	ERJ3GEYF163V	MGF CHIP 1/16W 16K	MKI
R8536	ERJ3GEYJ622V	MGF CHIP 1/16W 6.2K	MKI
R8557	ERJ3GEYJ471V	MGF CHIP 1/16W 470	MKI
R8558	ERJ3GEYJ471V	MGF CHIP 1/16W 470	MKI
R8565	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	MKI
R8566	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8567	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	MKI
R8568	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8570	ERJ3GEY0R00V	MGF CHIP 1/16W 0	MKI
R8571	ERJ3GEY0R00V	MGF CHIP 1/16W 0	MKI
R8572	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	MKI
R8801	ERJ3GEYJ101V	MGF CHIP 1/16W 100	MKI
R8807	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	MKI
R8808	ERJ3GEYJ101V	MGF CHIP 1/16W 100	MKI
R8809	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	MKI
R8810	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	MKI
R8811	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	MKI
R8812	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	MKI
R8813	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1.0	MKI
R8814	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	MKI
R8815	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1.0	MKI
R8816	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1.0	MKI
R8817	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1.0	MKI
R8901	ERJ3GEYJ471V	MGF CHIP 1/16W 470	MKI
R8902	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI
R8903	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	MKI

Ref. No.	Part No.	Part Name & Description	Remarks
R8904	ERJ3GEYJ821V	MGF CHIP 1/16W 820	MKI
R8905	ERJ3GEYJ331V	MGF CHIP 1/16W 330	MKI
R8906	ERJ3GEYJ821V	MGF CHIP 1/16W 820	MKI
R8907	ERJ3GEYJ331V	MGF CHIP 1/16W 330	MKI
R8908	ERJ3GEYJ560V	MGF CHIP 1/10W 5.6K	MKI
R8909	ERJ3GEYJ560V	MGF CHIP 1/10W 5.6K	MKI
R8910	ERJ12YJ270U	MGF CHIP 1/16W 27	MKI
R8911	ERJ12YJ270U	MGF CHIP 1/16W 27	MKI
R8912	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	MKI
R8913	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	MKI
R8914	ERJ3GEYJ153V	MGF CHIP 1/16W 15K	MKI
R8916	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	MKI
R8917	ERJ3GEYJ100V	MGF CHIP 1/16W 10	MKI
R8918	ERJ3GEYJ100V	MGF CHIP 1/16W 10	MKI

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C8001	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8002	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8003	ECEA0JKA331I	ELECTROLYTIC 6.3V 330UF	MKI
C8004	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8006	ECJ1VB1H103K	C CHIP 50V 0.01UF	MKI
C8007	ECJ1VB1H103K	C CHIP 50V 0.01UF	MKI
C8009	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8010	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8011	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8012	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8013	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8014	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8015	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8016	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8017	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8018	ECEA0JKA331I	ELECTROLYTIC 6.3V 330UF	MKI
C8019	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8020	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8021	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8022	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8023	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8024	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8025	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8026	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8027	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8028	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8029	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8030	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8031	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8032	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8033	ECJ1VB1E333K	C CHIP 25V 0.033UF	MKI
C8034	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8035	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8036	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8037	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8038	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI

Ref. No.	Part No.	Part Name & Description	Remarks
C8039	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8040	ECJ1VB1H562K	C CHIP 50V 0.0056UF	MKI
C8041	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8042	ECJ1VB1E183K	C CHIP 25V 0.018UF	MKI
C8043	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8044	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8045	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8046	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8047	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8048	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8049	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8050	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8051	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8052	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8053	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8054	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8055	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8056	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8057	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8058	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8059	ECJ1VC1H330J	C CHIP 50V 33PF	MKI
C8060	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8061	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8062	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8063	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8064	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8065	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8066	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8067	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8068	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8069	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8070	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8071	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI
C8072	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	MKI
C8073	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	MKI
C8074	ECJ1VB1H102K	C CHIP 50V 1000PF	MKI
C8076	ECJ1VC1H050C	C CHIP 50V 5PF	MKI
C8077	ECJ1VC1H150J	C CHIP 50V 15PF	MKI
C8078	ECJ1VC1H150J	C CHIP 50V 15PF	MKI
C8080	ECJ1VB1H102K	C CHIP 50V 1000PF	MKI
C8081	ECJ1VB1H102K	C CHIP 50V 1000PF	MKI
C8082	ECJ1VC1H101J	C CHIP 50V 100PF	MKI
C8083	ECJ1VC1H101J	C CHIP 50V 100PF	MKI
C8086	ECEA1CKA100	ELECTROLYTIC 16V 10UF	MKI
C8090	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	MKI
C8091	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	MKI
C8401	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	MKI
C8402	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8403	ECEA0JKA331I	ELECTROLYTIC 6.3V 330UF	MKI
C8404	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8412	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	MKI
C8413	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8414	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8415	ECJ1VC1H220J	C CHIP 50V 22PF	MKI

Ref. No.	Part No.	Part Name & Description	Remarks
C8416	ECJ1VC1H220J	C CHIP 50V 22PF	MKI
C8417	ECJ1VC1H390J	C CHIP 50V 39PF	MKI
C8418	ECJ1VC1H390J	C CHIP 50V 39PF	MKI
C8419	ECJ1VC1H390J	C CHIP 50V 39PF	MKI
C8420	ECJ1VC1H390J	C CHIP 50V 39PF	MKI
C8421	ECJ1VC1H220J	C CHIP 50V 22PF	MKI
C8422	ECJ1VC1H220J	C CHIP 50V 22PF	MKI
C8423	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8424	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8425	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	MKI
C8504	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8505	ECEA1CKA100	ELECTROLYTIC 16V 10UF	MKI
C8506	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8507	ECEA1CKA100	ELECTROLYTIC 16V 10UF	MKI
C8508	ECEA1CKA100	ELECTROLYTIC 16V 10UF	MKI
C8512	ECEA1CKA100	ELECTROLYTIC 16V 10UF	MKI
C8513	ECEA1CKA100	ELECTROLYTIC 16V 10UF	MKI
C8520	ECEA1AKA330I	ELECTROLYTIC 10V 33UF	MKI
C8521	ECEA1CKA101I	ELECTROLYTIC 16V 100UF	MKI
C8522	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8523	ECEA1AKA330I	ELECTROLYTIC 10V 33UF	MKI
C8536	ECJ1VC1H101J	C CHIP 50V 100PF	MKI
C8537	ECJ1VC1H101J	C CHIP 50V 100PF	MKI
C8544	ECJ1VB1H102K	C CHIP 50V 1000PF	MKI
C8545	ECJ1VB1H102K	C CHIP 50V 1000PF	MKI
C8553	ECJ1VB1H472K	C CHIP 50V 4700PF	MKI
C8555	ECJ1VB1H472K	C CHIP 50V 4700PF	MKI
C8568	ECEA1CKA100	ELECTROLYTIC 16V 10UF	MKI
C8569	ECEA1CKA100	ELECTROLYTIC 16V 10UF	MKI
C8806	F1K1A106A005	C CHIP 10V 10UF	MKI
C8808	F1K1A106A005	C CHIP 10V 10UF	MKI
C8809	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8810	ECJ1VC1H391J	C CHIP 50V 390PF	MKI
C8811	F1K1A106A005	C CHIP 10V 10UF	MKI
C8812	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8813	ECJ1VC1H391J	C CHIP 50V 390PF	MKI
C8814	F1K1A106A005	C CHIP 10V 10UF	MKI
C8816	ECJ1VB1H472K	C CHIP 50V 4700PF	MKI
C8817	F1K1A106A005	C CHIP 10V 10UF	MKI
C8901	ECJ1VB0J105K	C CHIP 6.3V 1UF	MKI
C8903	ECJ1VC1H471J	C CHIP 50V 470PF	MKI
C8905	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8907	ECJ1VB1C104K	C CHIP 16V 0.1UF	MKI
C8908	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	MKI
C8909	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	MKI
C8912	ECJ1VC1H680J	C CHIP 50V 68PF	MKI
C8913	ECJ1VC1H561J	C CHIP 50V 560PF	MKI
C8914	ECJ2FB0J106K	C CHIP 6.3V 10UF	MKI

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL8402	F1Z1E2220002	FILTER	MKI
FL8501	J0HAAG000015	FILTER	MKI
FL8502	J0HAAG000015	FILTER	MKI

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L8001	J0JCC0000117	EMI FILTER CHIP	MKI
L8002	J0JDC0000002	EMI FILTER CHIP	MKI
L8003	ERJ3GEY0R00V	MGF CHIP 1/16W 0	MKI
L8005	J0JDC0000002	EMI FILTER CHIP	MKI
L8006	J0JCC0000215	EMI FILTER CHIP	MKI
L8007	J0JDC0000002	EMI FILTER CHIP	MKI
L8008	J0JDC0000002	EMI FILTER CHIP	MKI
L8009	J0JDC0000002	EMI FILTER CHIP	MKI
L8010	J0JHC0000027	CHIP EMI FILTER	MKI
L8011	J0JCC0000215	COIL CHIP 220UH	MKI
L8012	J0JCC0000215	COIL CHIP 220UH	MKI
L8013	J0JCC0000215	COIL CHIP 220UH	MKI
L8014	J0JCC0000063	FILTER	MKI
L8015	J0JCC0000063	FILTER	MKI
L8016	J0JCC0000063	FILTER	MKI
L8017	J0JCC0000063	FILTER	MKI
L8018	J0JCC0000063	FILTER	MKI
L8019	J0JCC0000215	COIL CHIP 220UH	MKI
L8020	J0JCC0000215	COIL CHIP 220UH	MKI
L8021	J0JCC0000215	COIL CHIP 220UH	MKI
L8401	J0JDC0000002	EMI FILTER CHIP	MKI
L8402	G1C270MA0021	COIL CHIP 27UH	MKI
L8403	G1C270MA0021	COIL CHIP 27UH	MKI
L8404	G1C330MA0021	COIL CHIP 27UH	MKI
L8405	G1C330MA0021	COIL CHIP 27UH	MKI
L8406	G1C270MA0021	COIL CHIP 27UH	MKI
L8407	G1C270MA0021	COIL CHIP 27UH	MKI
L8408	J0JDC0000002	EMI FILTER CHIP	MKI
L8411	ERJ3GEY0R00V	MGF CHIP 1/16W 0	MKI
L8412	J0JHC0000068	EMI FILTER CHIP	MKI
L8413	J0JHC0000078	EMI FILTER CHIP	MKI
L8415	J0JHC0000068	EMI FILTER CHIP	MKI
L8416	J0JBC0000010	CHIP EMI FILTER	MKI
L8418	J0JBC0000010	CHIP EMI FILTER	MKI
L8419	J0JBC0000010	CHIP EMI FILTER	MKI
L8420	J0JBC0000010	CHIP EMI FILTER	MKI
L8421	J0JBC0000010	CHIP EMI FILTER	MKI
L8422	J0JBC0000010	CHIP EMI FILTER	MKI
L8424	J0JBC0000010	CHIP EMI FILTER	MKI
L8429	J0JHC0000078	EMI FILTER CHIP	MKI
L8431	J0JCC0000063	FILTER	MKI
L8434	J0JCC0000063	FILTER	MKI
L8501	J0JBC0000010	CHIP EMI FILTER	MKI
L8503	J0JBC0000010	CHIP EMI FILTER	MKI
L8517	J0JCC0000063	FILTER	MKI
L8518	J0JDC0000002	EMI FILTER CHIP	MKI
L8901	J0JDC0000002	EMI FILTER CHIP	MKI

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X8001	H0J270500066	CRYSTAL OSCILLATOR	MKI

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P8401	K1MN16A00071	CONNECTOR 16P	MKI
P8402	K1MR11A00017	CONNECTOR 11P	MKI
P8801	K1MN13B00062	CONNECTOR 13P	MKI
P8901	K1MN26B00076	CONNECTOR 26P	MKI

12.3.11. DVD SUB C.B.A.

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW8952	K0L1BA000015	SWITCH	MKI
SW8953	K0L1BA000014	SWITCH	MKI

13. SCHEMATIC DIAGRAMS FOR PRINTING WITH LETTER SIZE

DVD MAIN I SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

REC VIDEO SIGNAL
PB VIDEO SIGNAL
REC AUDIO SIGNAL
PB AUDIO SIGNAL

IC8003 C3ABPG000133 C3ABPG000067 C3ABPG000102 C3ABPG000135 (64Mb SDRAM)

IC8005 C0DBEZ0000017 +1.2V REGULATOR

IC8001 MN2DS023VP1H DVD SIGNAL PROCESSOR / DVD MICROCONTROLLER

IC8002 LSSK0039 16Mb FLASH ROM TSOP TYPE

IC8004 LSUD0062 (EEPROM)

SDRAM

SYSTEM CONTROL

AV DECODER CPRM(DVD-RAM PLAYBACK)

VIDEO ENCODER

BACK END (DECODER)

FRONT END (DRIVE)

SYSTEM CONTROL MICROPROCESSOR

32BIT CPU

ECC

CIRC

DVD/CD FORMATTER

DRC

AGC / DIGITAL EQ

RF SIGNAL GENERATOR

SERVO DSP

SERVO DPS (DEGITAL SIGNAL PROCESS)

SERVO SIGNAL GENERATUR

FD DRV
TK DRV

LPC

HOST I/F(SERIAL)
MOTOR DRIVE MODE CONTROL
TRAY CONTROL
I2C

DIGITAL AUDIO
MULTI CHANNEL AUDIO
MULTI CHANNEL AUDIO
MULTI CHANNEL AUDIO
DOWN MIX AUDIO

TO DVD M II
1 D_GND
2 D_+3.3V

TO DVD M III
3 CTL1
4 CTL2
5 CLOSE
6 OPEN
7 H_RDY
8 DVD_SCK
9 DVD_DATA
10 HOST_DATA
11 D_RDY
12 RST
13 FG
14 TRVIN
15 SPIN
16 HFMON
17 TRAYIN
18 VR-CD
19 VR-DVD

TO DVD M II
20 AUDIO_DAC
21 D_AUDIO
22 VIDEO_GND
23 S-C
24 S-Y
25 Pr
26 Pb
27 Y
28 FDIN
29 TKIN
30 AD0
31 AD1
32 VIN1
33 VIN2
34 VIN3
35 VIN4
36 VIN5
37 VIN6
38 VIN7
39 VIN8
40 VREF2.2V
41 VHALF
42 RFP
43 RFN
44 A_GND
45 A_+3.3V
46 LPCO2
47 LPCO1
48 PIN_CD/DVD

P8002 PT
1 D_GND
2 TRCDATA3
3 D_GND
4 TRCDATA2
5 TRCST
6 TRCDATA1
7 TRCCLK
8 TRCDATA0

P8003 PT
1 NRST
2 SDATA
3 D_GND
4 EXTING
5 D_GND
6 SCLOCK
7 D_GND
8 RMODE
9 VDD33
10 VDD33

P8001 PT
1 MON10
2 MON11
3 MON12
4 MON13
5 D_GND
6 MON14
7 MON15
8 MON16
9 MON17
10 D_GND

LINK TO VOLTAGE CHART
LSJB2145
DVD MAIN I SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

I/O CHART OF IC8002

Pin No.	I/O	Signal Name	Description
1	I	A15	Memory address 16
2	I	A14	Memory address 15
3	I	A13	Memory address 14
4	I	A12	Memory address 13
5	I	A11	Memory address 12
6	I	A10	Memory address 11
7	I	A9	Memory address 10
8	I	A8	Memory address 9
9	I	NC	Memory address 20
10	I	NC	Memory address 21
11	I	/WE	Write enable : low
12	I	/RST	Reset : low
13	-	NC	(Not used)
14	-	VPP/WP	(Not used)
15	I	RDY/BSY	DVD Ready (Busy : low)
16	I	A18	Memory address 19
17	I	A17	Memory address 18
18	I	A7	Memory address 8
19	I	A6	Memory address 7
20	I	A5	Memory address 6
21	I	A4	Memory address 5
22	I	A3	Memory address 4
23	I	A2	Memory address 3
24	I	A1	Memory address 2
25	I	A0	Memory address 1
26	I	/CE	Memory chip select : low
27	-	VSS	Ground
28	I	/OE	Output enable : low
29	I/O	DQ0	Memory data 0
30	I/O	DQ8	Memory data 8
31	I/O	DQ1	Memory data 1
32	I/O	DQ9	Memory data 9
33	I/O	DQ2	Memory data 2
34	I/O	DQ10	Memory data 10
35	I/O	DQ3	Memory data 3
36	I/O	DQ11	Memory data 11
37	I	VCC	+3.3V
38	I/O	DQ4	Memory data 4
39	I/O	DQ12	Memory data 12
40	I/O	DQ5	Memory data 5
41	I/O	DQ13	Memory data 13
42	I/O	DQ6	Memory data 6
43	I/O	DQ14	Memory data 14
44	I/O	DQ7	Memory data 7
45	I/O	DQ15A-1	Memory data 15
46	-	VSS	Ground
47	I	/BYTE	+3.3V
48	I	A16	Memory address 16

I/O CHART OF IC8003

Pin No.	I/O	Signal Name	Description
1	I	VDD	+3.3V
2	I/O	DQ0	SDRAM data 0
3	I	VDDQ	+3.3V
4	I/O	DQ1	SDRAM data 1
5	I/O	DQ2	SDRAM data 2
6	-	VSSQ	Ground
7	I/O	DQ3	SDRAM data 3
8	I/O	DQ4	SDRAM data 4
9	I	VDDQ	+3.3V
10	I/O	DQ5	SDRAM data 5
11	I/O	DQ6	SDRAM data 6
12	-	VSSQ	Ground
13	I/O	DQ7	SDRAM data 7
14	I	VDD	+3.3V
15	I	LDQM	Data input/output mask
16	I	/WE	Write enable : low
17	I	/CAS	Column address strobe : low
18	I	/RAS	Row address strobe :low
19	I	/CS	SDRAM chip select : low
20	I	BA0	Bank address 0
21	I	BA1	Bank address 1
22	I	A10/AP	SDRAM address 10
23	I	A0	SDRAM address 0
24	I	A1	SDRAM address 1
25	I	A2	SDRAM address 2
26	I	A3	SDRAM address 3
27	I	VDD	+3.3V
28	-	VSS	Ground
29	I	A4	SDRAM address 4
30	I	A5	SDRAM address 5
31	I	A6	SDRAM address 6
32	I	A7	SDRAM address 7
33	I	A8	SDRAM address 8
34	I	A9	SDRAM address 9
35	I	A11	SDRAM address 11
36	-	NC	(Not used)
37	-	CKE	(Not used)
38	I	CLK	SDRAM clock
39	I	UDQM	Data input/output mask
40	-	NC	(Not used)
41	-	VSS	Ground
42	I/O	DQ8	SDRAM data 8
43	I	VDDQ	+3.3V
44	I/O	DQ9	SDRAM data 9
45	I/O	DQ10	SDRAM data 10
46	-	VSSQ	Ground
47	I/O	DQ11	SDRAM data 11
48	I/O	DQ12	SDRAM data 12
49	I	VDDQ	+3.3V
50	I/O	DQ13	SDRAM data 13
51	I/O	DQ14	SDRAM data 14
52	-	VSSQ	Ground
53	I/O	DQ15	SDRAM data 15
54	-	VSS	Ground

I/O CHART OF IC8004

Pin No.	I/O	Signal Name	Description
1	-	A0	(Not used)
2	-	A1	(Not used)
3	-	A2	(Not used)
4	-	VSS	Ground
5	I/O	SDA	Serial data
6	I	SCL	Serial clock
7	-	WP	Write protect
8	I	VCC	+3.3V

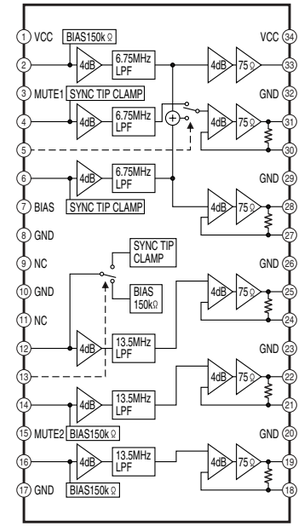
DVD MAIN II SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

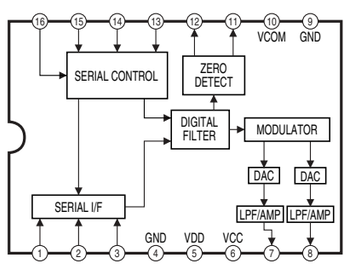
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IC8401 IC-DETAIL BLOCK DIAGRAM



IC8501 IC-DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART

LSJB2145

DVD MAIN II SCHEMATIC DIAGRAM

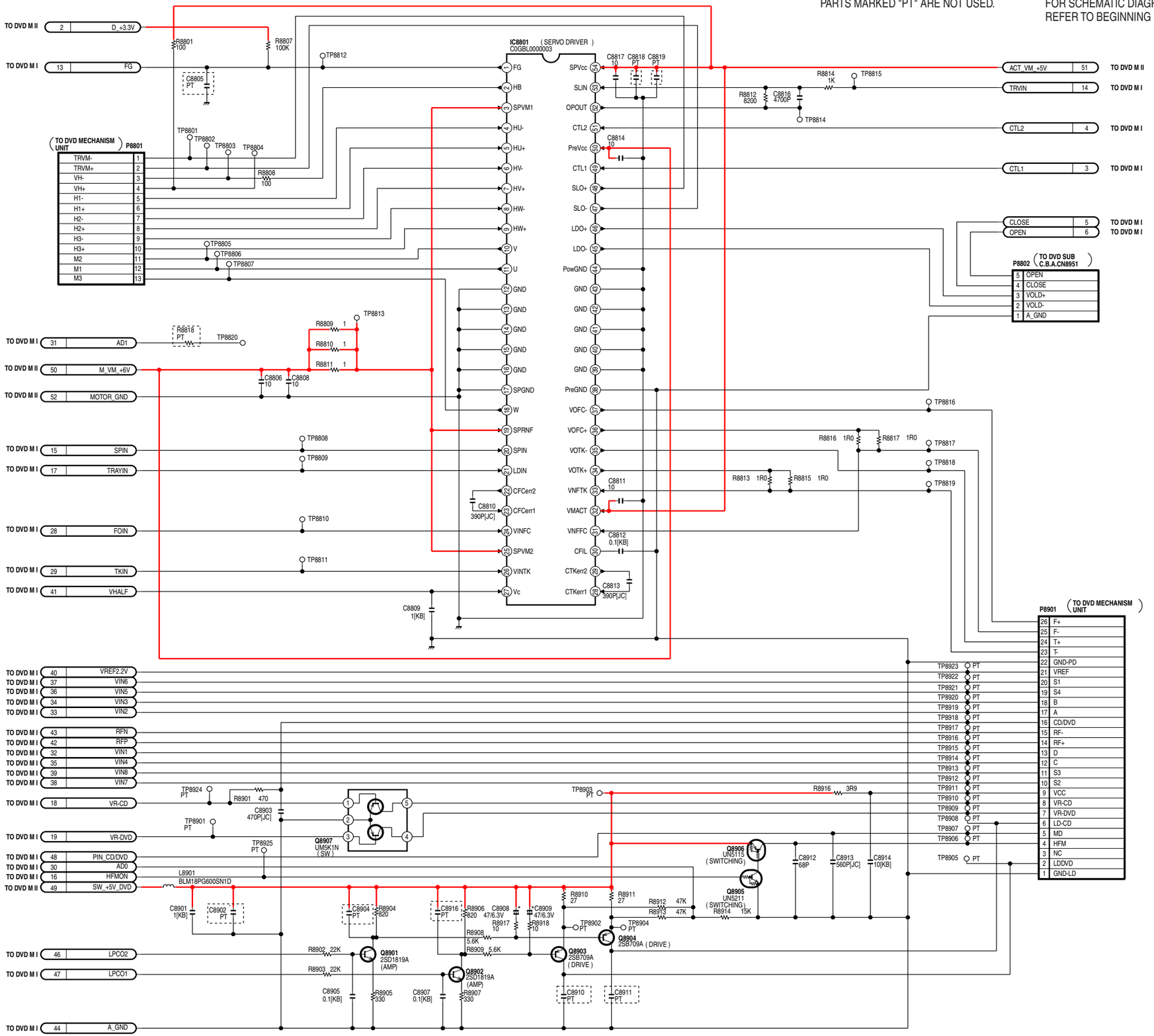
PV-DF204/PV-DF2004/PV-DF2004-K /PV-DF274/PV-DF2704/PV-DF2704-K

DVD MAIN III SCHEMATIC DIAGRAM

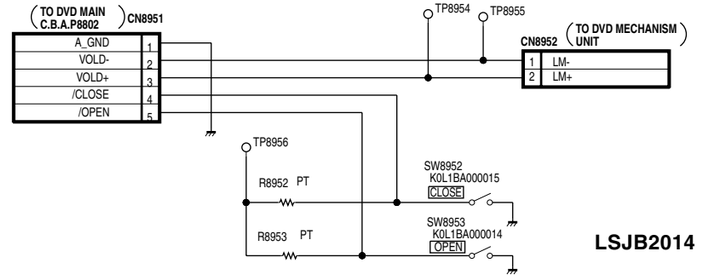
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

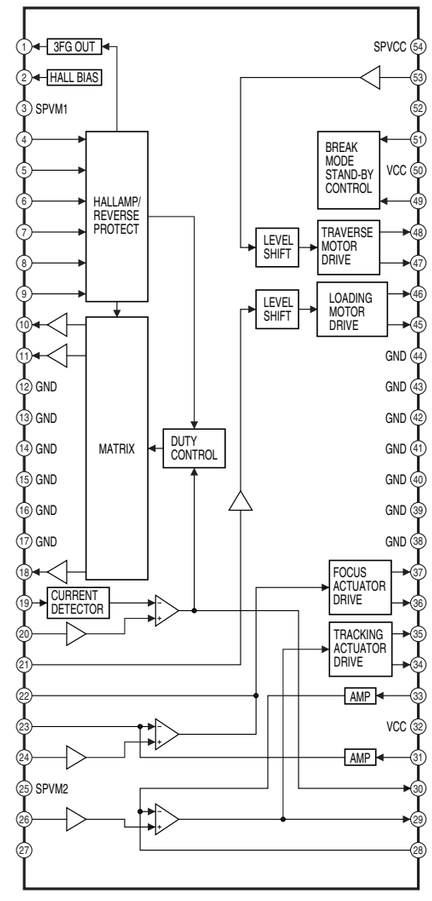


DVD SUB SCHEMATIC DIAGRAM



LSJB2014

IC8801 IC-DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART

LSJB2145
DVD MAIN III / DVD SUB SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

INTERCONNECTION SCHEMATIC DIAGRAM

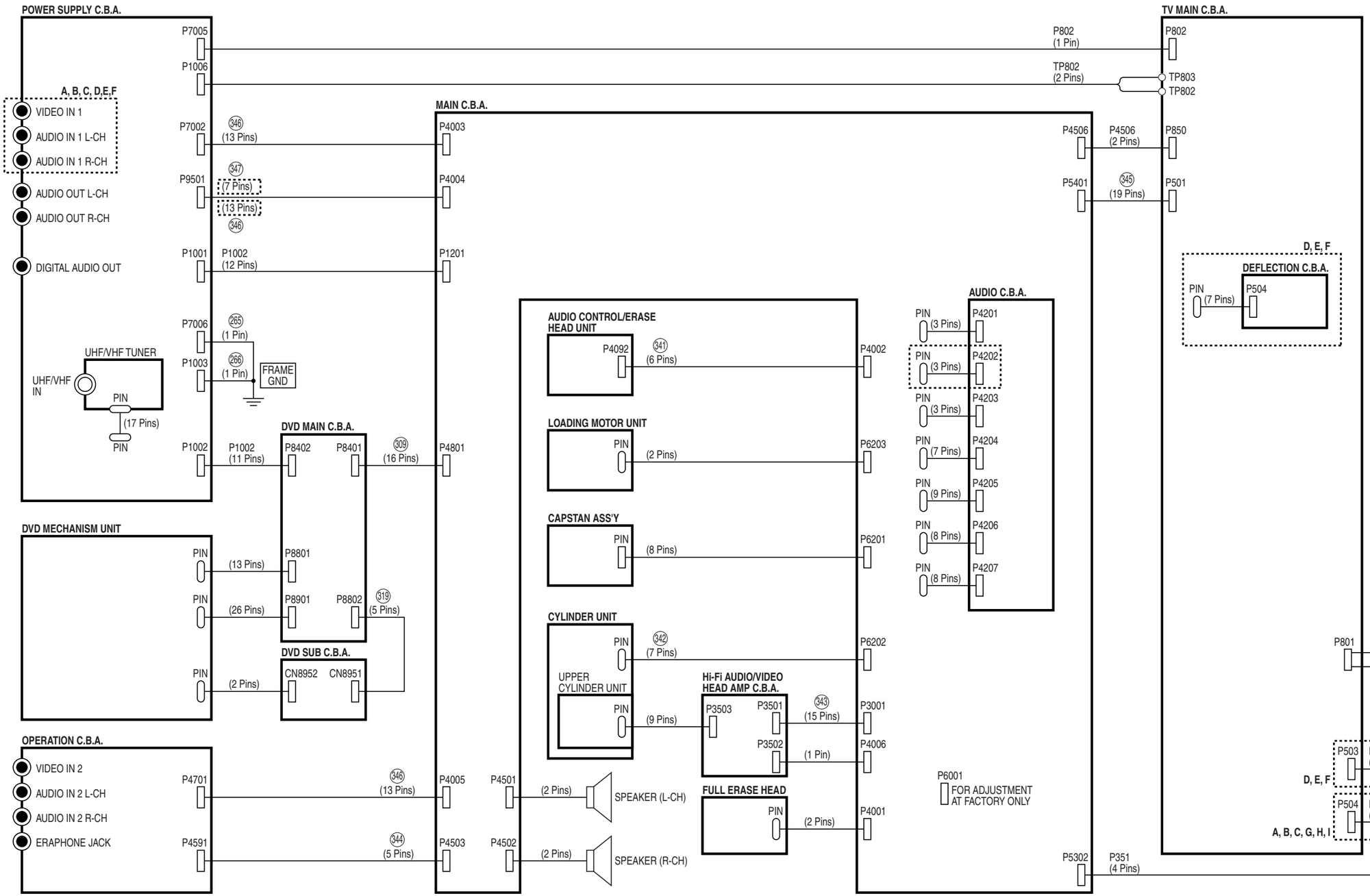
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



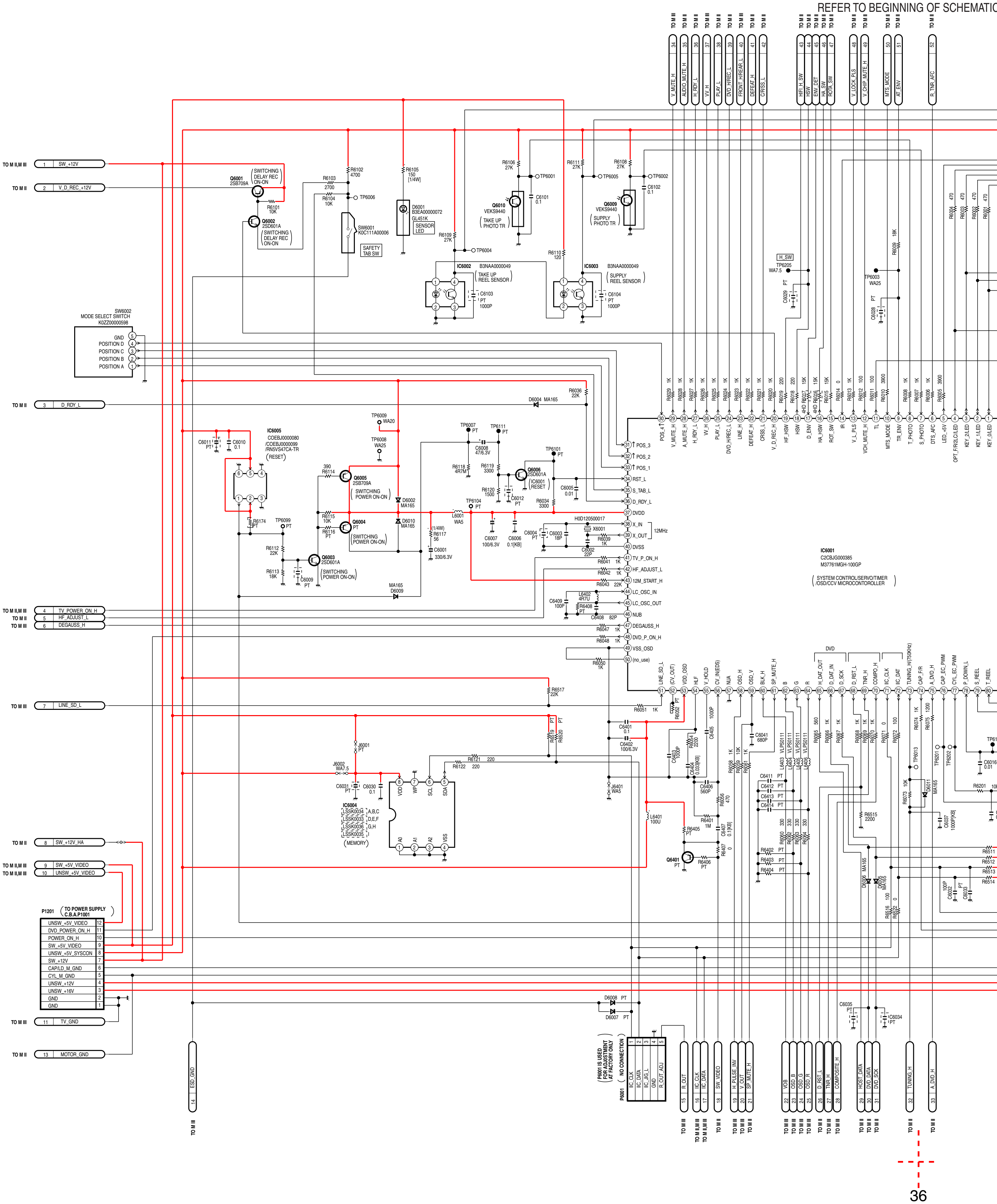
INTERCONNECTION SCHEMATIC DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K /PV-DF274/PV-DF2704/PV-DF2704-K

8.2. MAIN SCHEMATIC DIAGRAMS

MAIN I SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

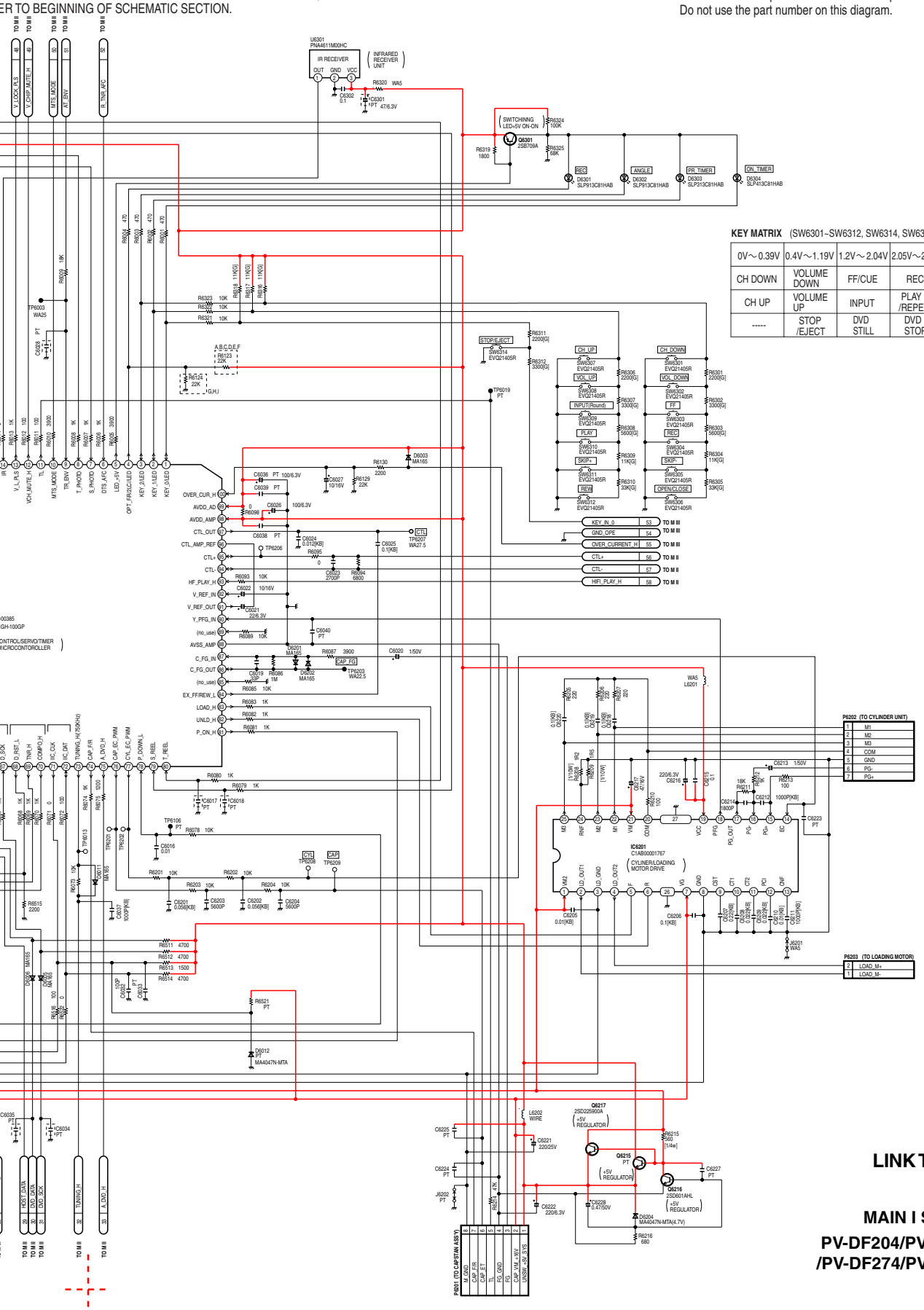
NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

KEY MATRIX (SW6301~SW6312, SW6314, SW6381~SW6384)

0V～0.39V	0.4V～1.19V	1.2V～2.04V	2.05V～2.94V	2.95V～3.79V	3.8V～4.59V	TERMINAL VOLTAGE
CH DOWN	VOLUME DOWN	FF/CUE	REC	SKIP –	OPEN /CLOSE	OPERATION BUTTON
CH UP	VOLUME UP	INPUT	PLAY /REPEAT	SKIP +	REW /REVIEW	
-----	STOP /EJECT	DVD STILL	DVD STOP	DVD PLAY	POWER	

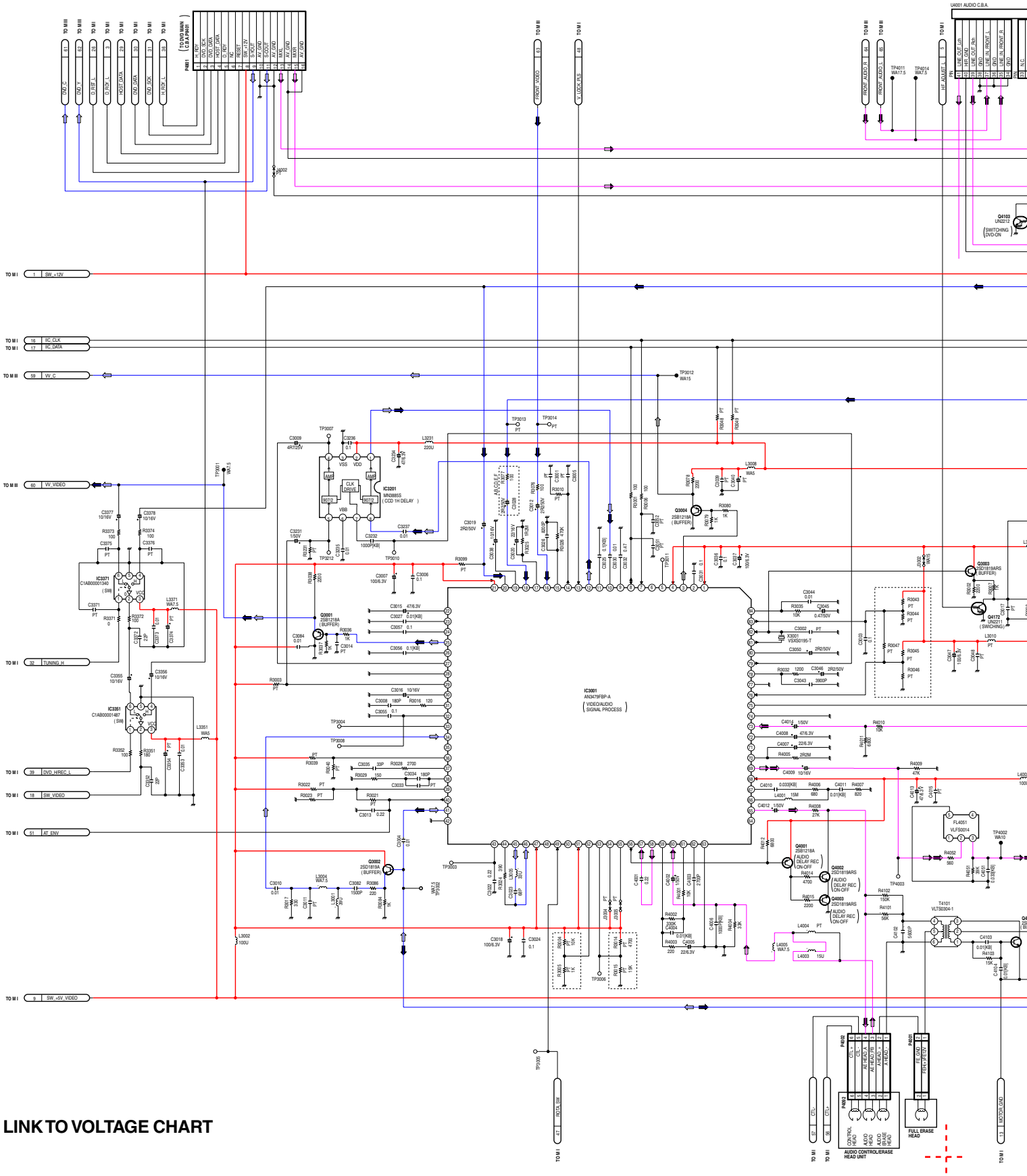


LINK TO VOLTAGE CHART

LSJB2132
MAIN I SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

MAIN II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



LINK TO VOLTAGE CHART

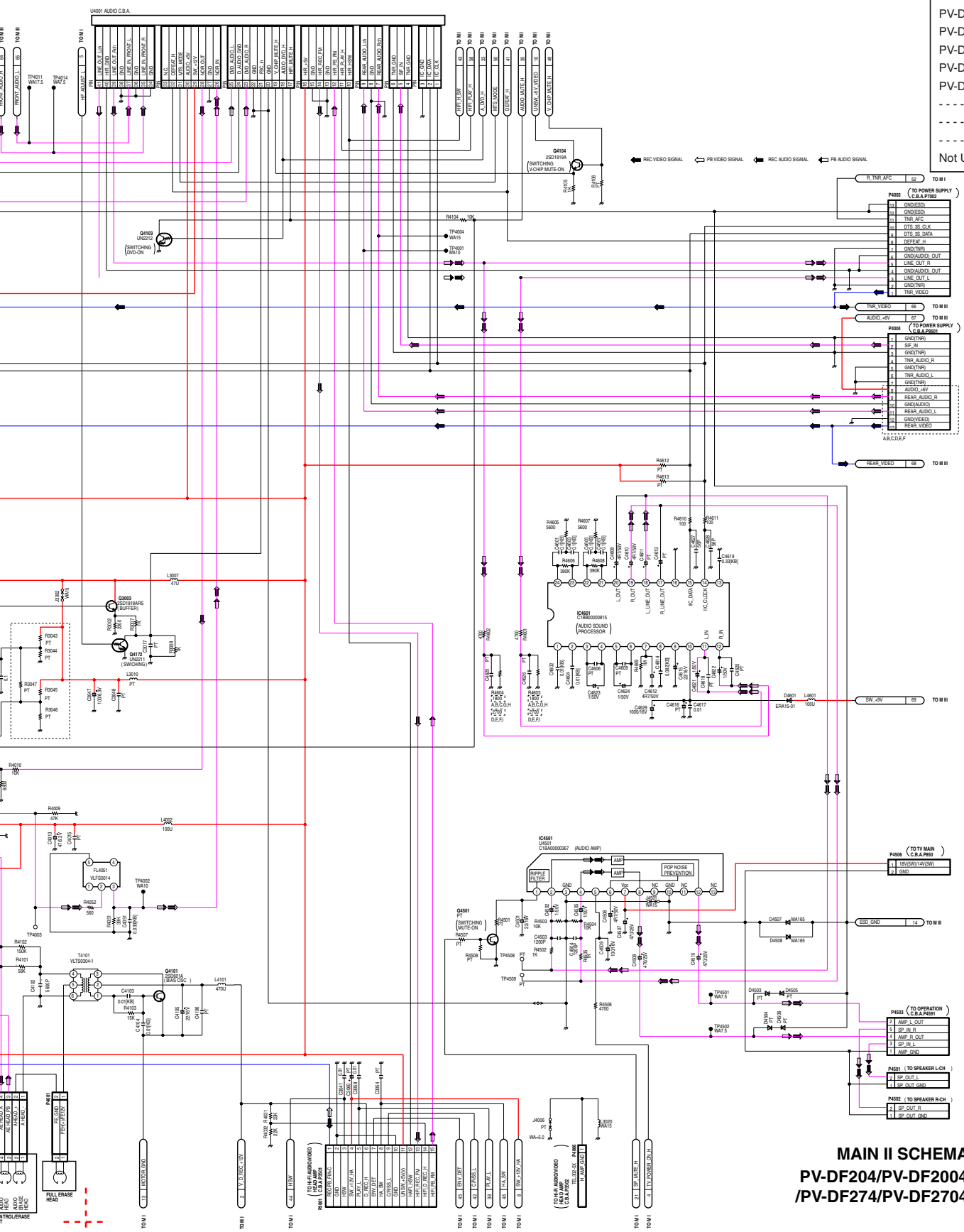
SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

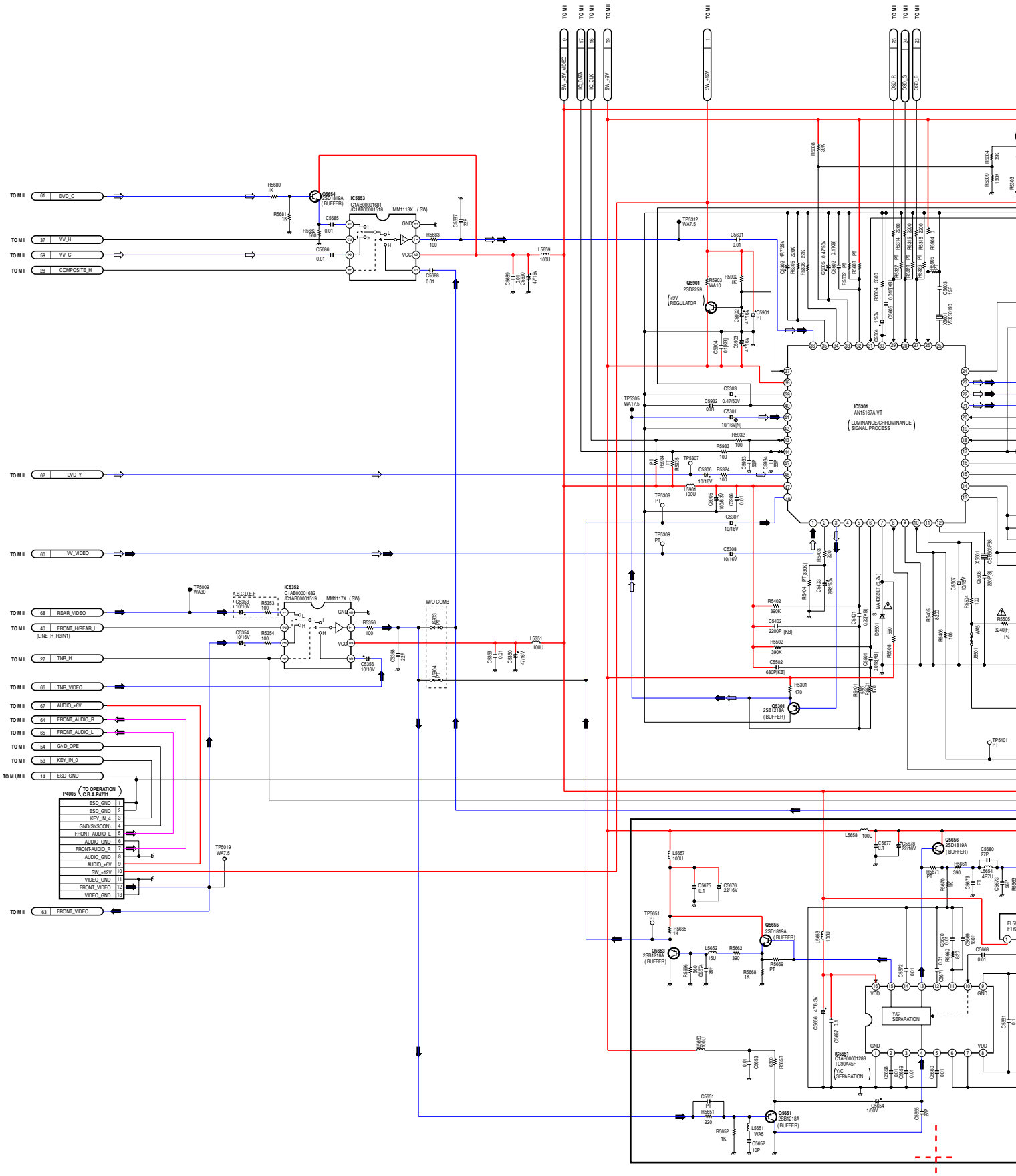
MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



LSJB2132
MAIN II SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

MAIN III SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

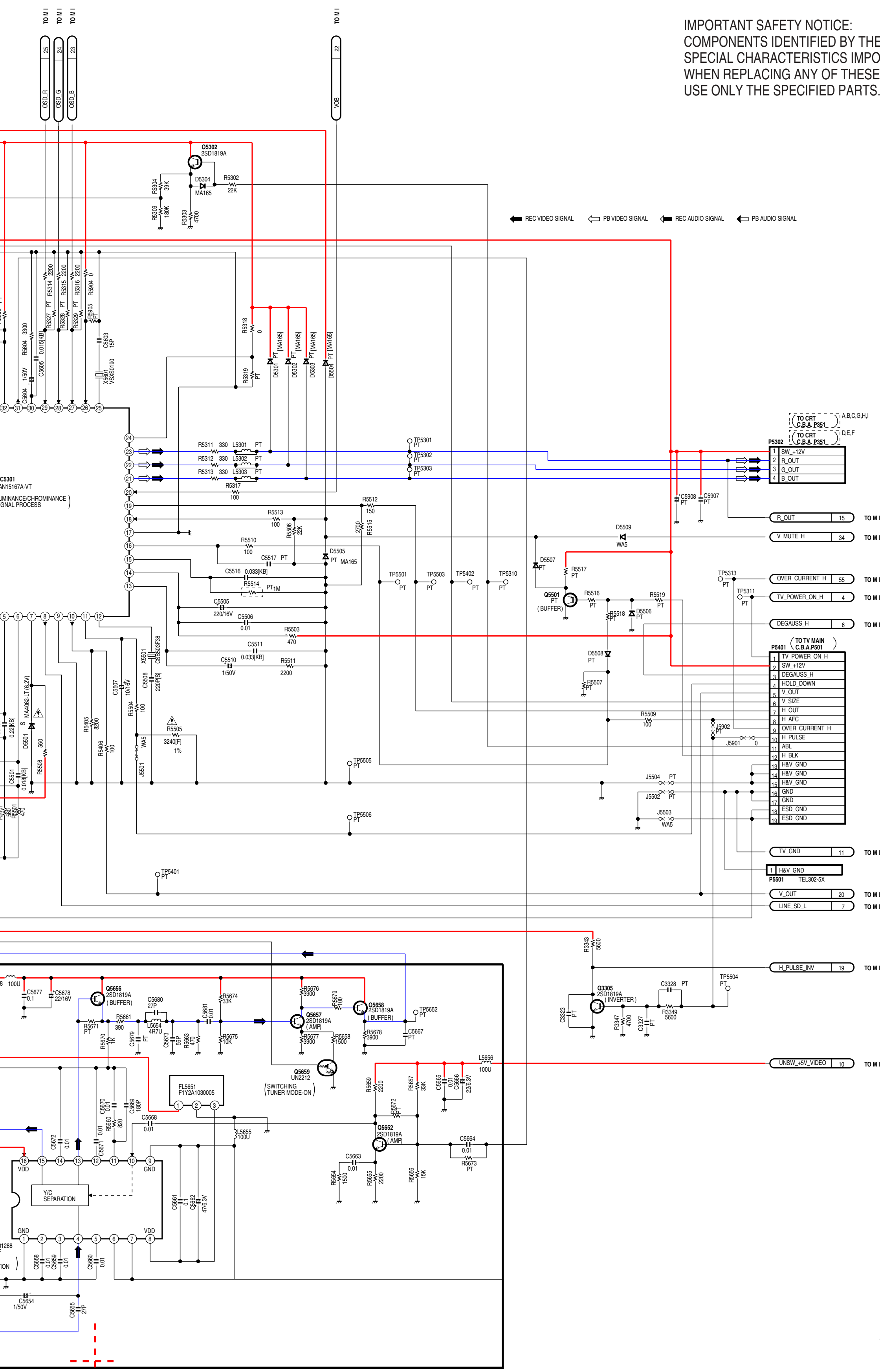
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT


REC VIDEO SIGNAL
PB VIDEO SIGNAL
REC AUDIO SIGNAL
PB AUDIO SIGNAL
TO M I
OSD_R 25
OSD_G 24
OSD_B 23
VOB 22
Q5302 2SD1819A
IC5301 AN15167A-VT
LUMINANCE/CHROMINANCE SIGNAL PROCESS
TO CRT C.B.A. P351 A,B,C,G,H,I
TO CRT C.B.A. P351 D,E,F
P5302
1 SW_+12V
2 R_OUT
3 G_OUT
4 B_OUT
R_OUT 15
V_MUTE_H 34
OVER_CURRENT_H 55
TV_POWER_ON_H 4
DEGAUSS_H 6
P5401 TO TV MAIN C.B.A.P501
1 TV_POWER_ON_H
2 SW_+12V
3 DEGAUSS_H
4 HOLD_DOWN
5 V_OUT
6 V_SIZE
7 H_OUT
8 H_AFC
9 OVER_CURRENT_H
10 H_PULSE
11 ABL
12 H_BLK
13 H&V_GND
14 H&V_GND
15 H&V_GND
16 GND
17 GND
18 ESD_GND
19 ESD_GND
TV_GND 11
P5501 TEL302-5X
1 H&V_GND
V_OUT 20
LINE_SD_L 7
H_PULSE_INV 19
UNSW_+5V_VIDEO 10
Q5501 (BUFFER)
Q5656 2SD1819A (BUFFER)
Q5657 2SD1819A (AMP)
Q5658 2SD1819A (BUFFER)
Q5659 UN2212 (SWITCHING TUNER MODE-ON)
Q5652 2SD1819A (AMP)
Q3305 2SD1819A (INVERTER)
FL5651 F1Y2A1030005
Y/C SEPARATION
VDD
GND

LINK TO VOLTAGE CHART

LSJB2132
MAIN III SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

8.3. AUDIO SCHEMATIC DIAGRAMS

AUDIO SCHEMATIC DIAGRAM

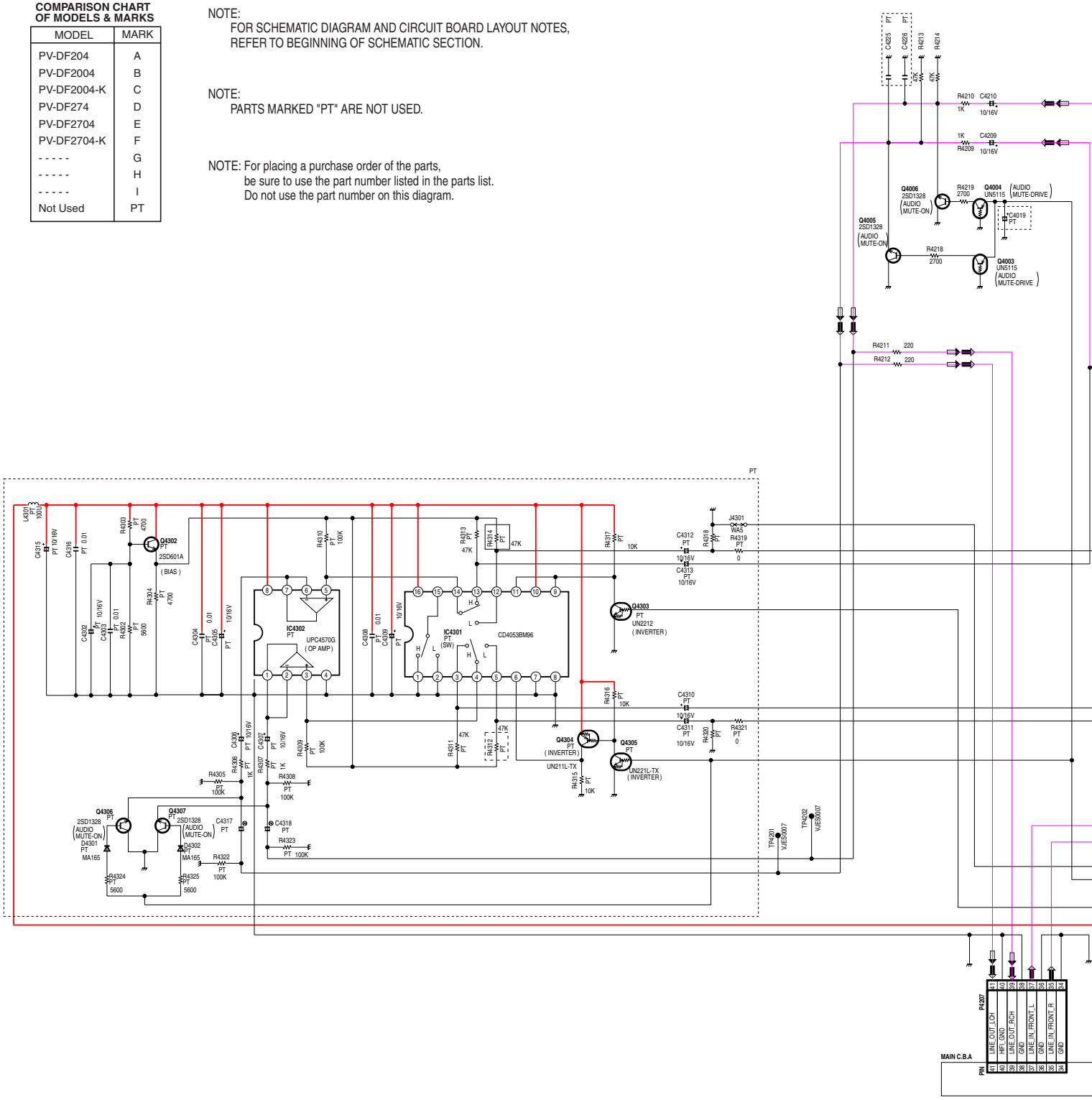
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

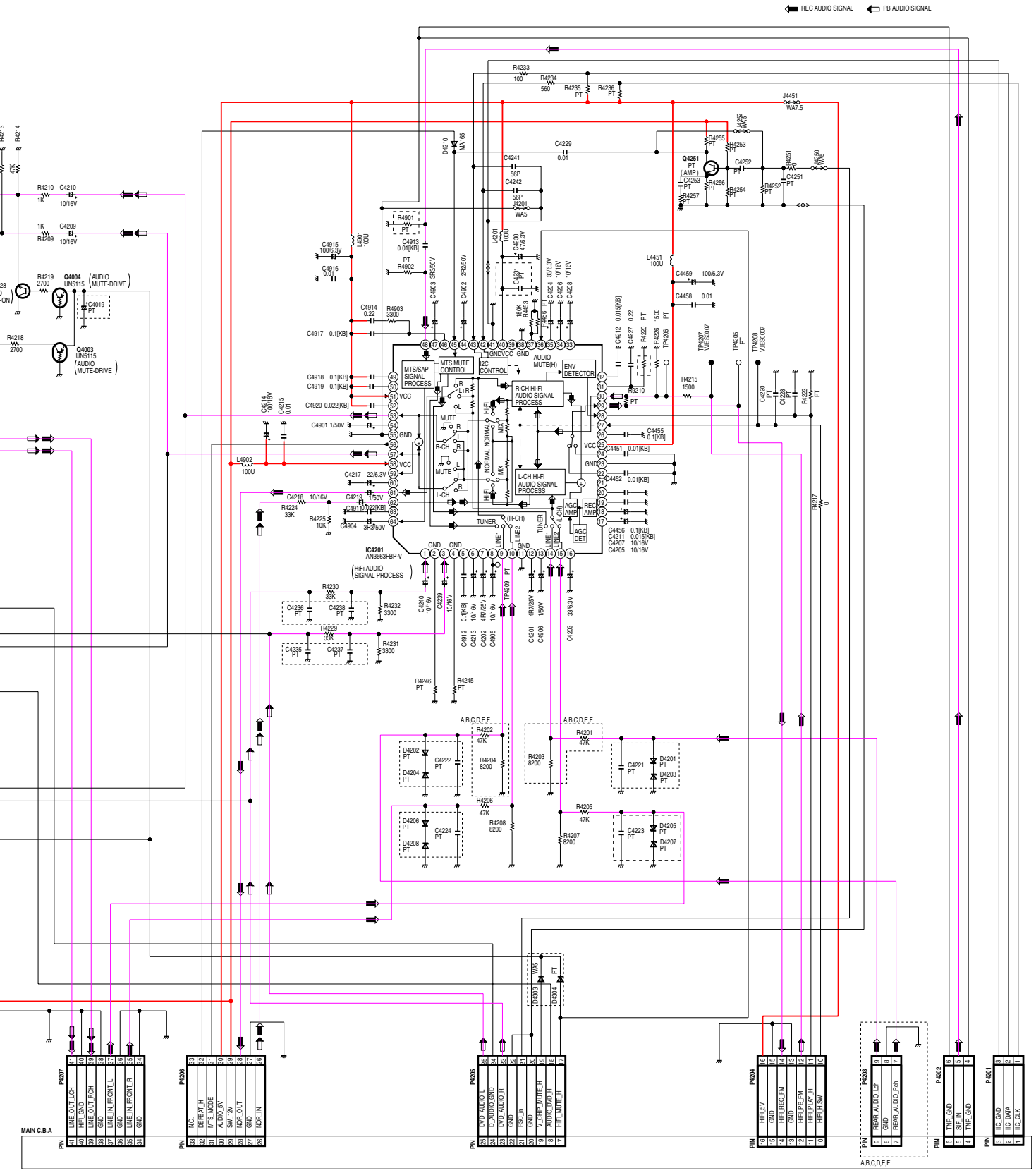
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

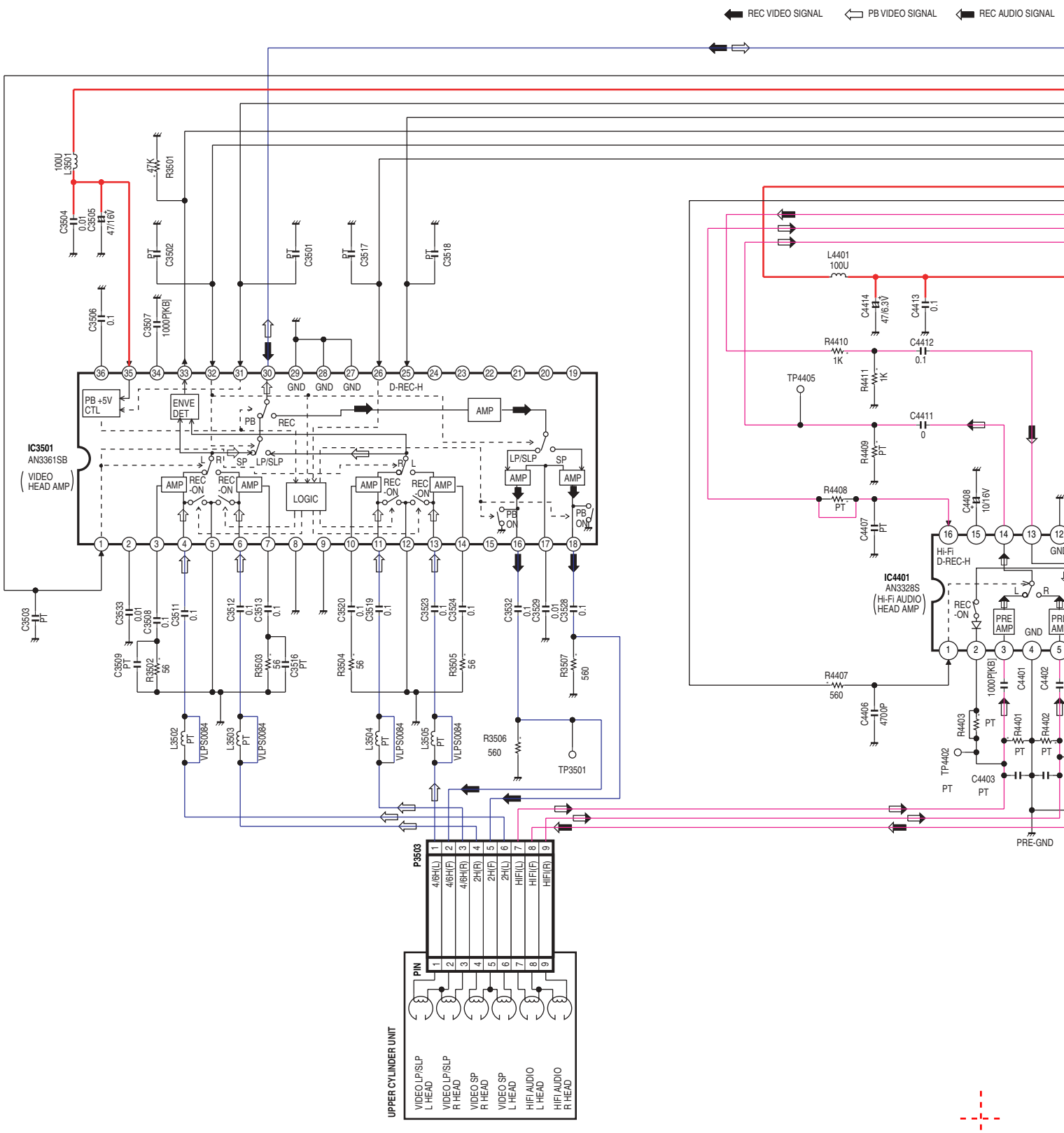


LSJB2133
AUDIO SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

8.4. HI-FI AUDIO/VIDEO HEAD AMP SCHEMATIC DIAGRAM

Hi-Fi AUDIO/VIDEO HEAD AMP SCHEMATIC DIAGRAM

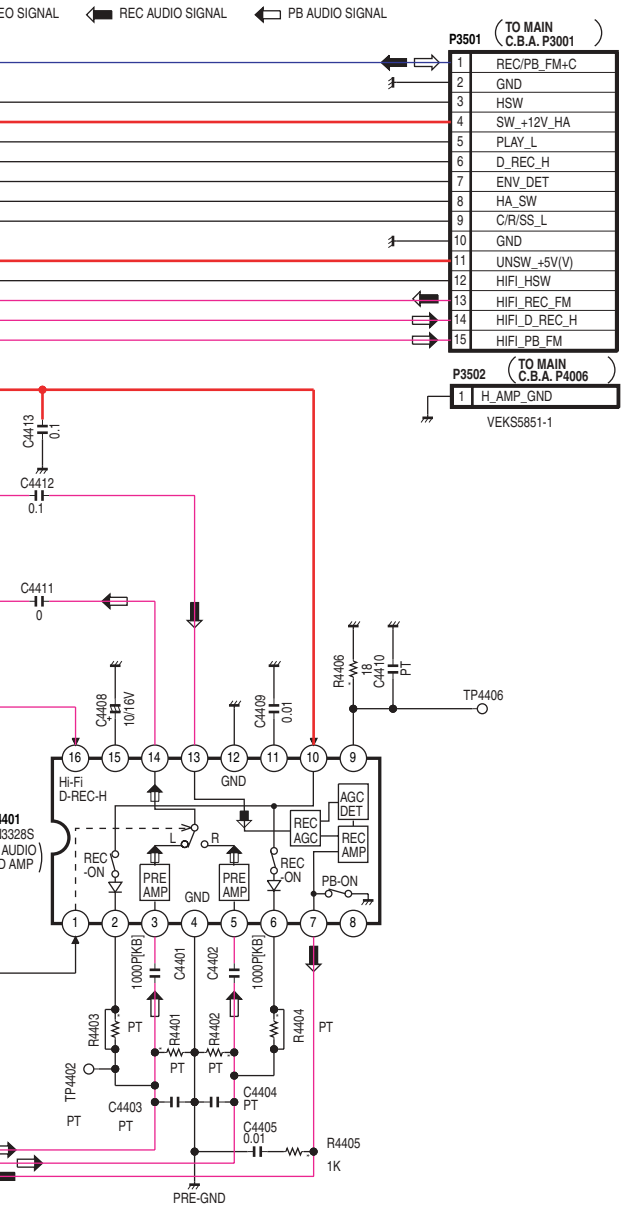
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BO
REFER TO BEGINNING OF SCHEMATIC SEC



EMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



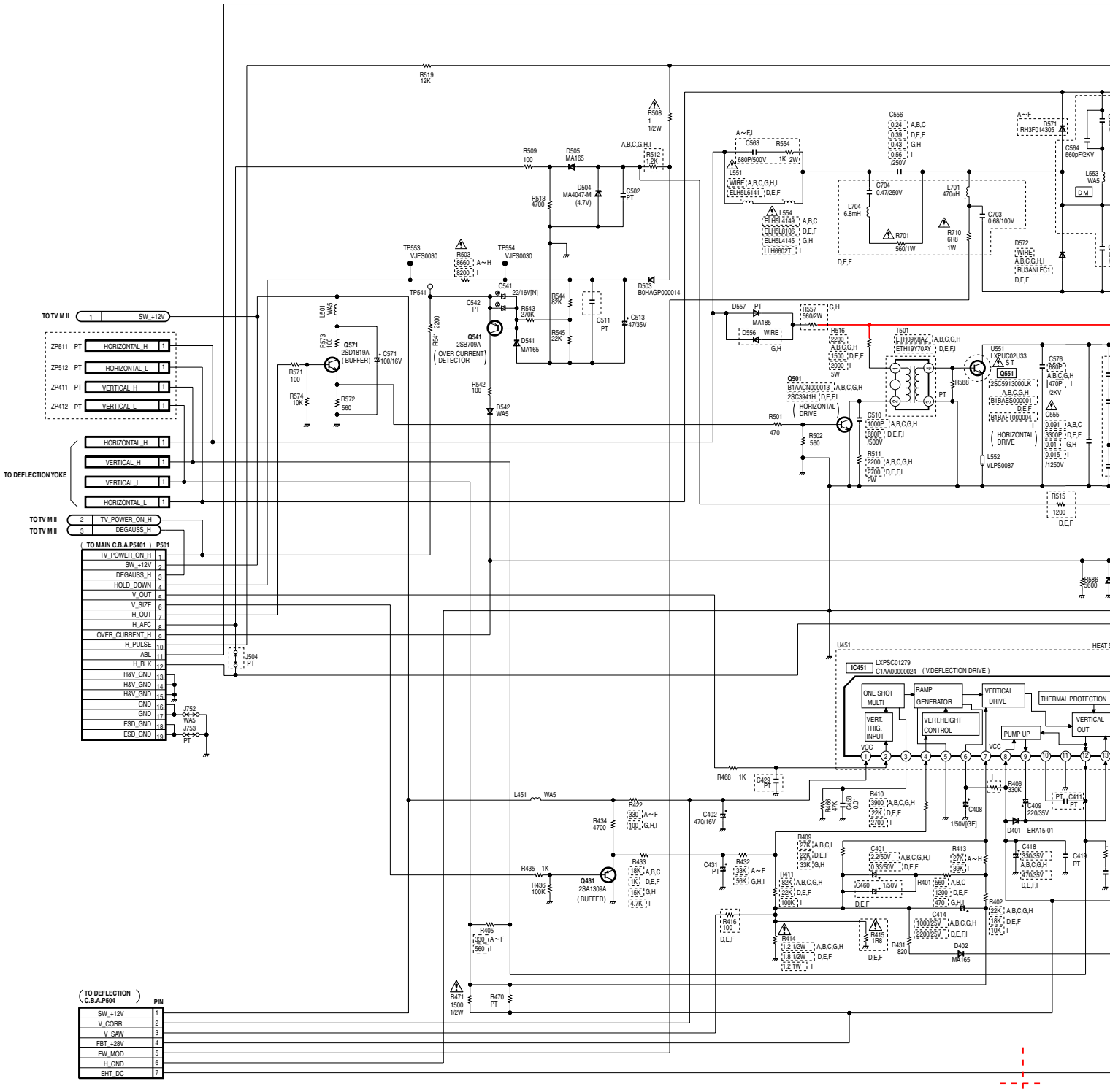
LINK TO VOLTAGE CHART

LSJB2141
Hi-Fi AUDIO/VIDEO HEAD AMP SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

8.5. TV MAIN SCHEMATIC DIAGRAMS

TV MAIN I SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

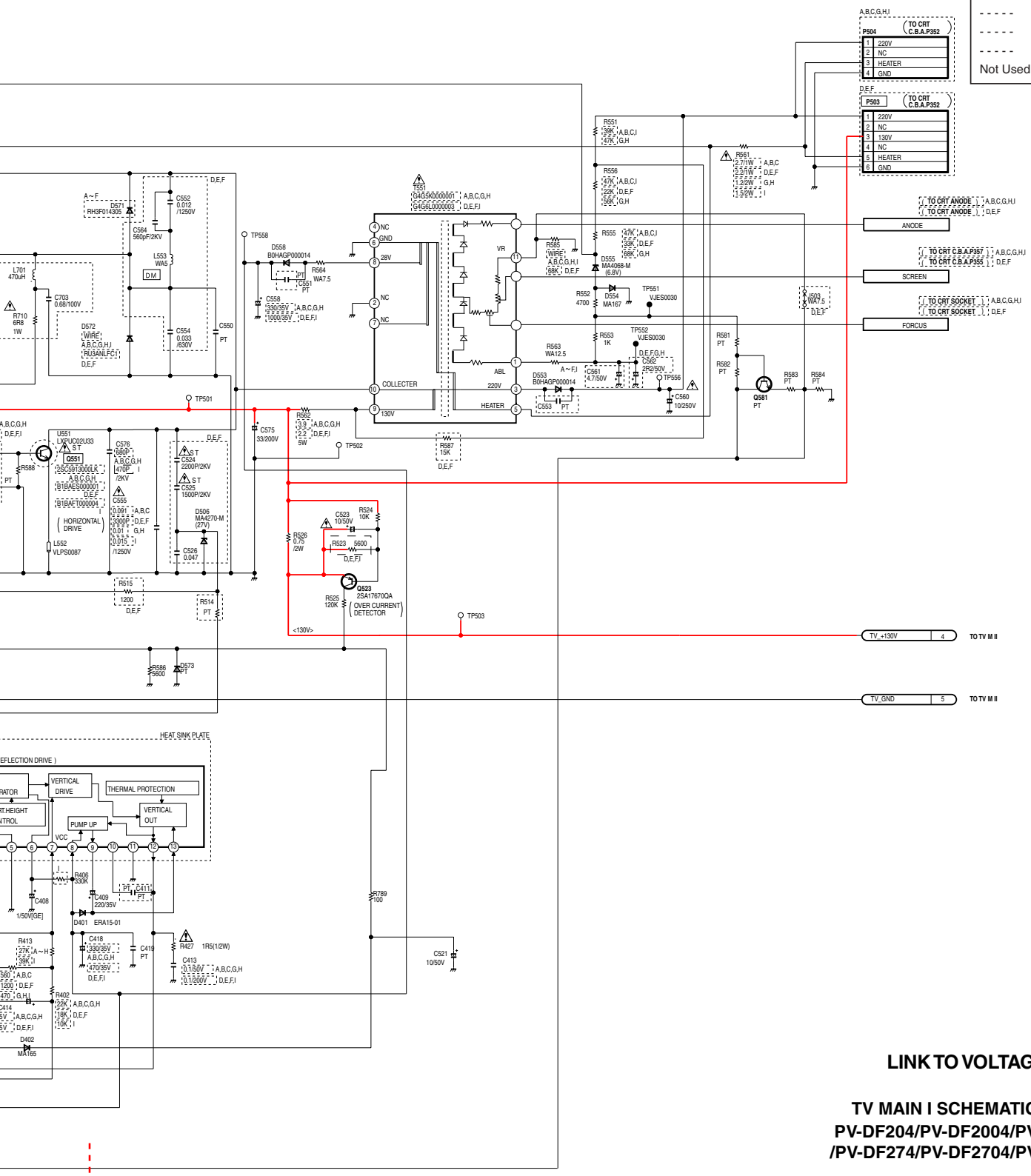
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



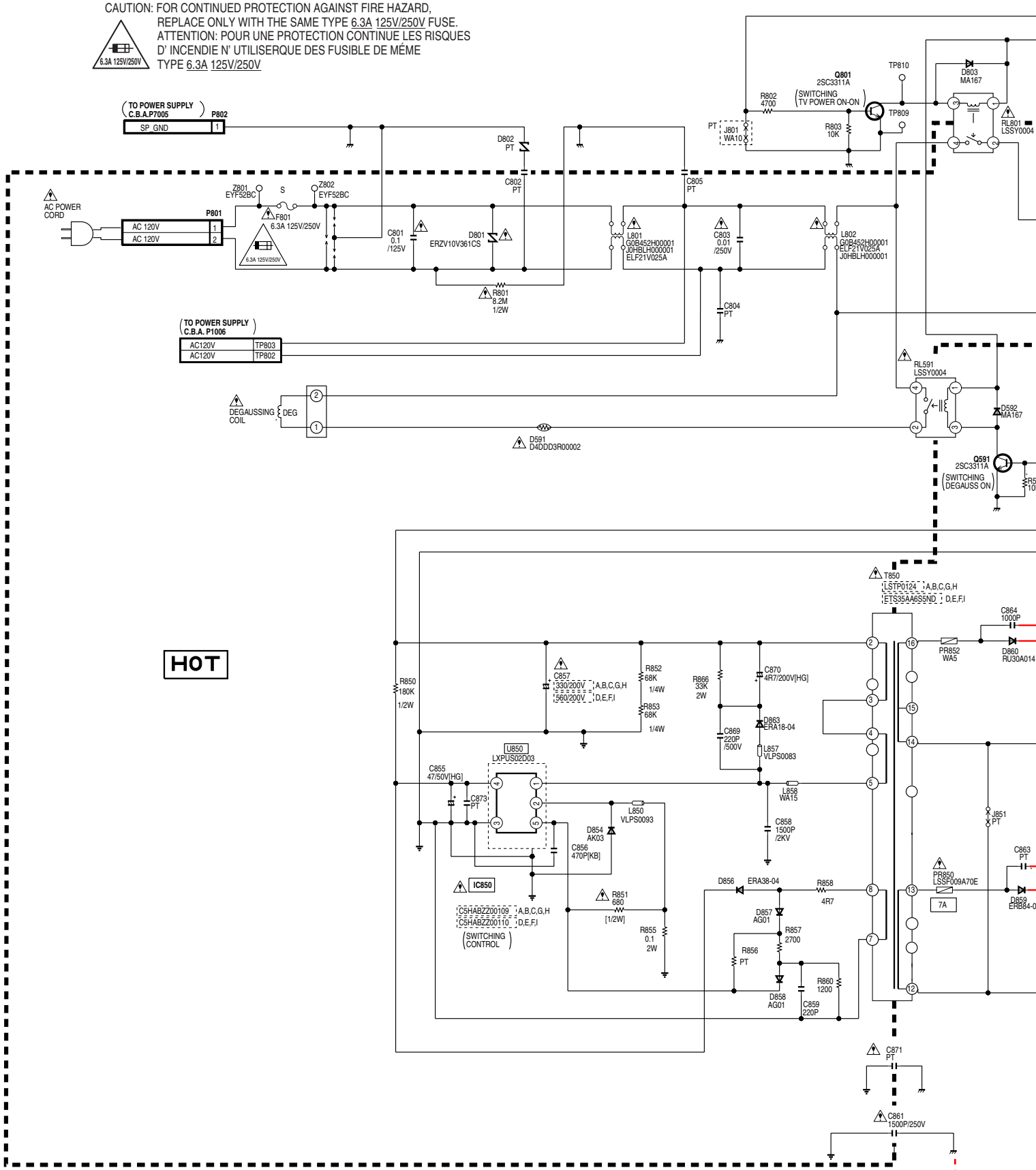
LINK TO VOLTAGE CHART

LSJB2151
TV MAIN I SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

TV MAIN II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 6.3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME
TYPE 6.3A 125V/250V



HOT

HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.

SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

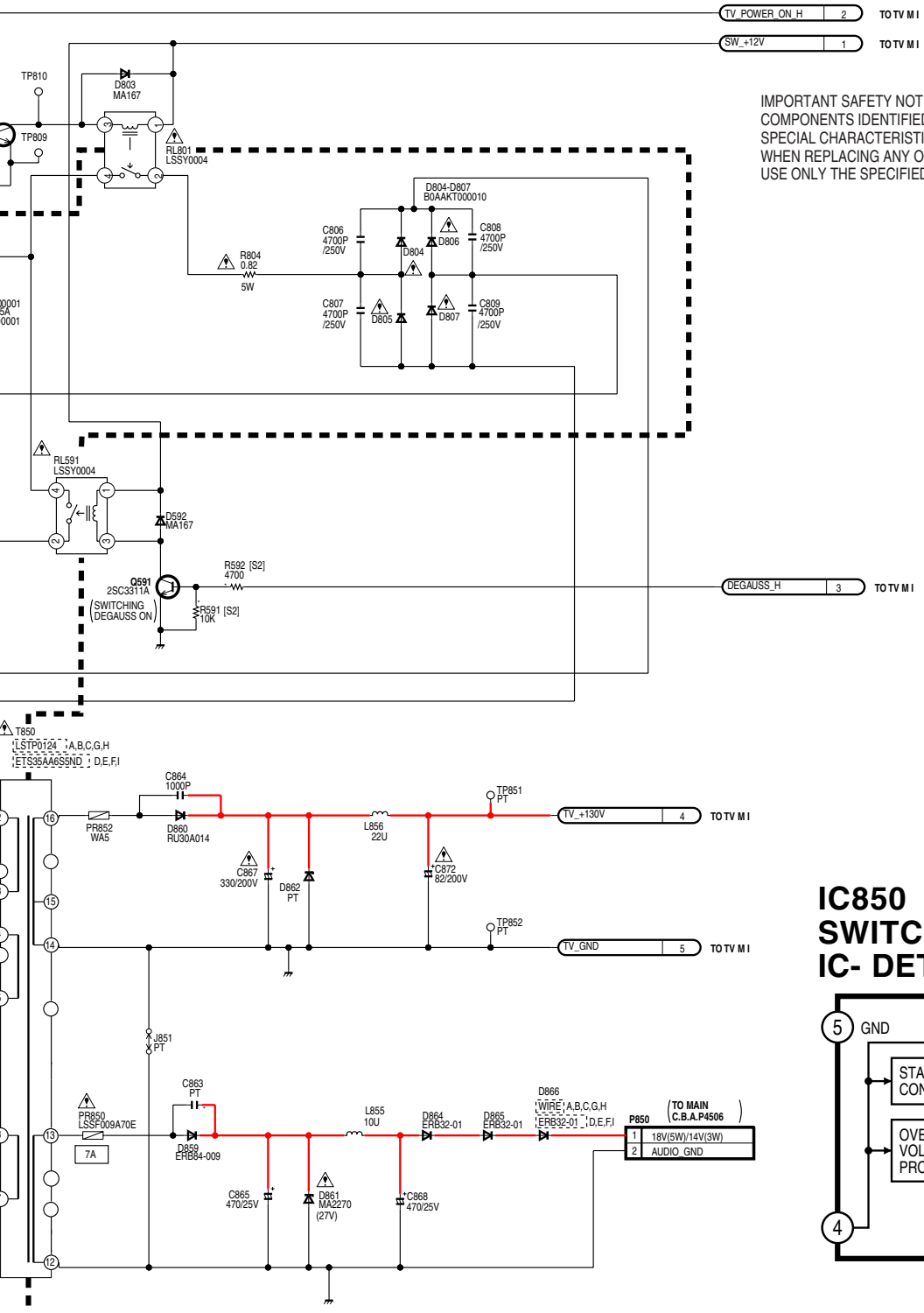
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

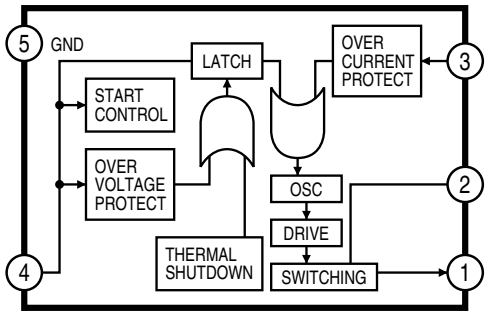
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



IC850
SWITCHING CONTROL
IC- DETAIL BLOCK DIAGRAM



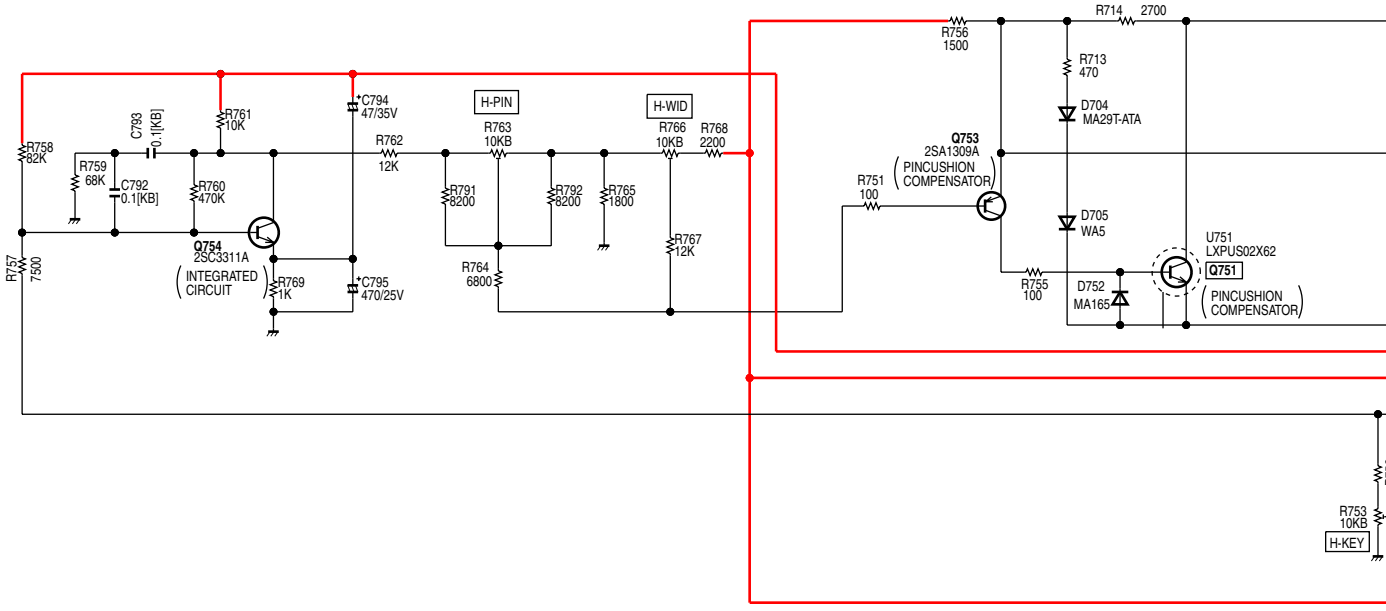
LINK TO VOLTAGE CHART

LSJB2151
TV MAIN II SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

8.6. DEFLECTION SCHEMATIC DIAGRAM (Models:PV-DF274/PV-DF2704/PV-DF27

DEFLECTION SCHEMATIC DIAGRAM (D, E, F)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



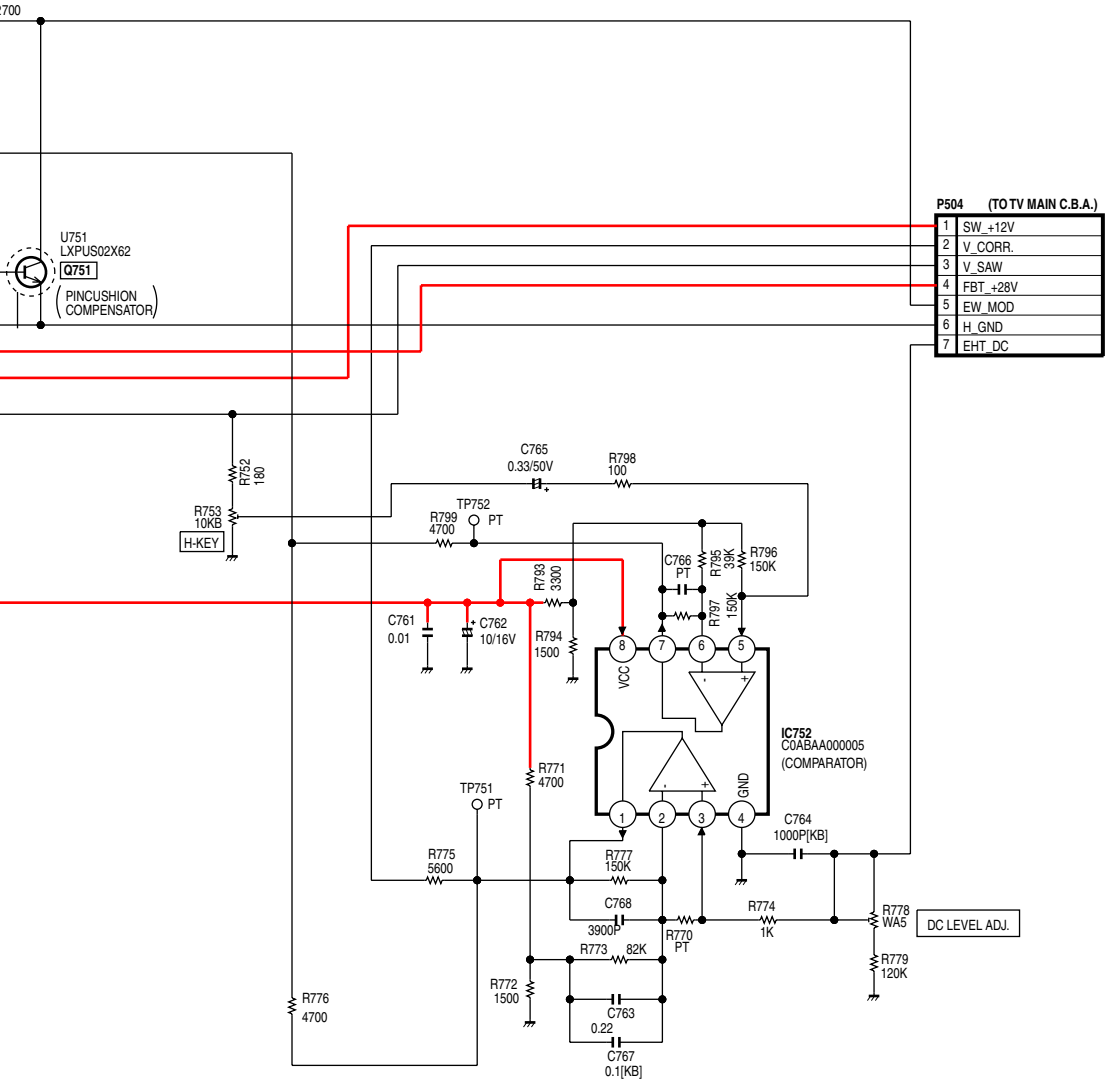
SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



LINK TO VOLTAGE CHART

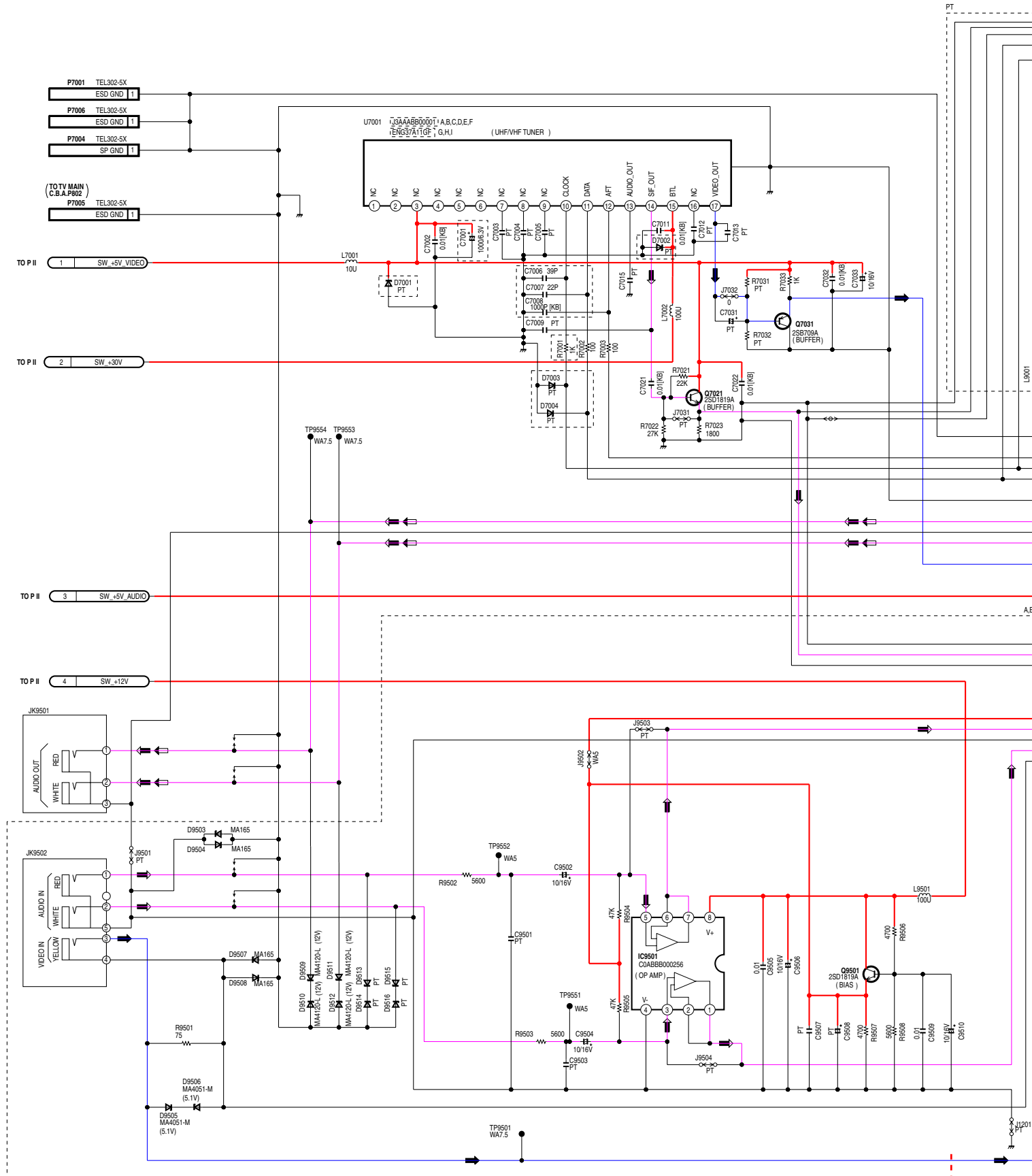
LSJB2075
DEFLECTION SCHEMATIC DIAGRAM

PV-DF274/PV-DF2704/PV-DF2704-K

8.7. POWER SUPPLY SCHEMATIC DIAGRAMS

POWER SUPPLY I SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



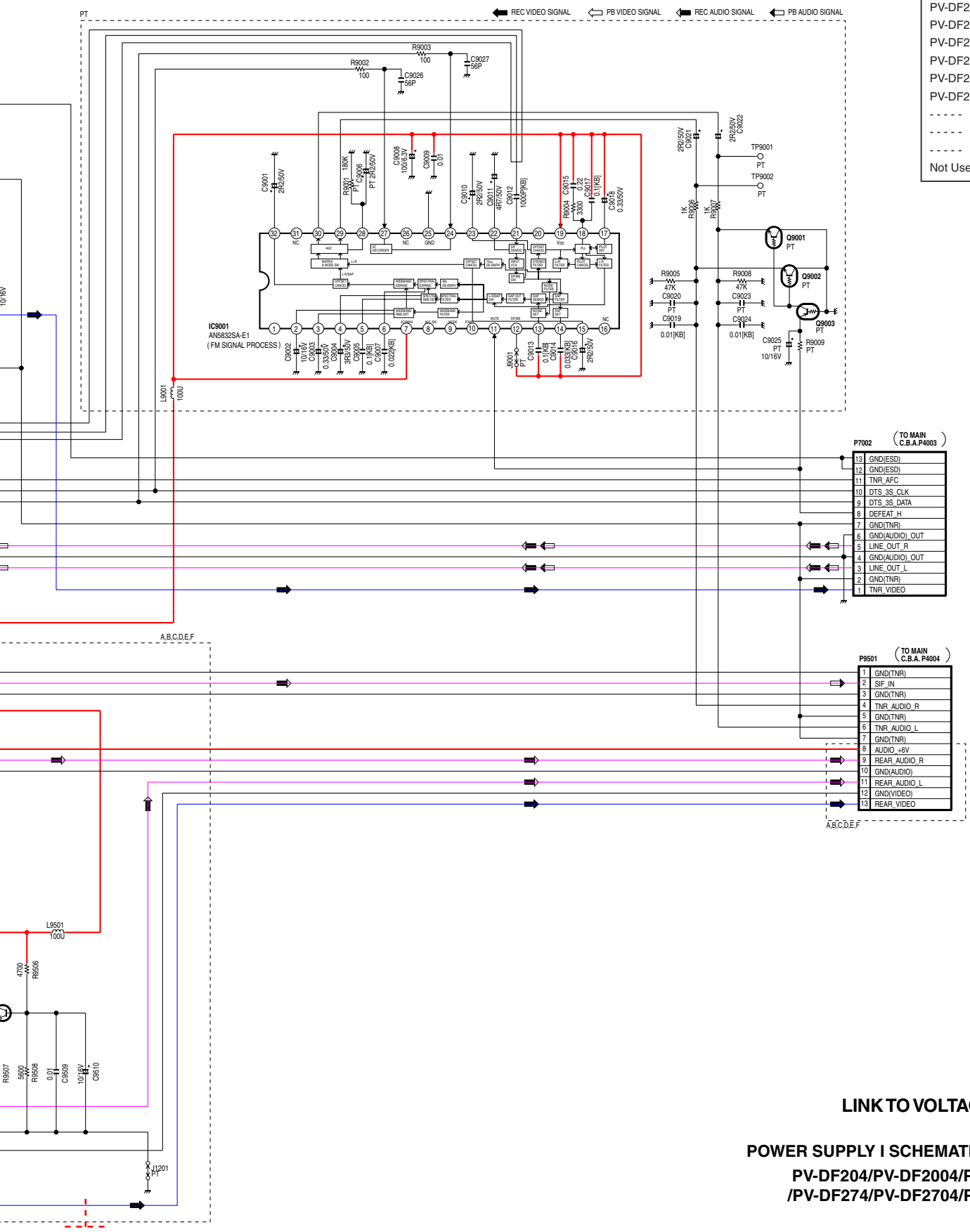
SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



LINK TO VOLTAGE CHART

LSJB2155

POWER SUPPLY I SCHEMATIC DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K /PV-DF274/PV-DF2704/PV-DF2704-K

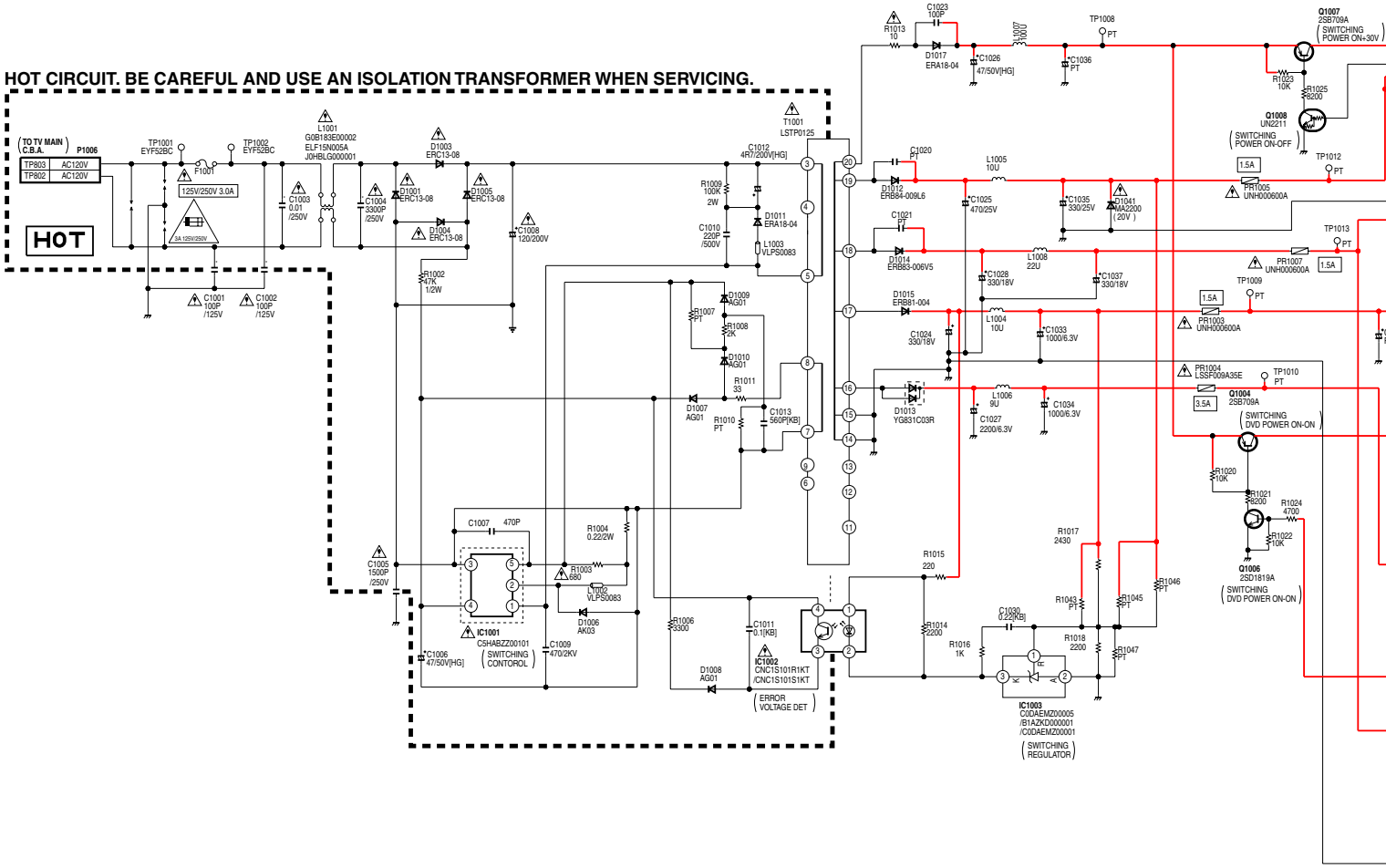
POWER SUPPLY II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC

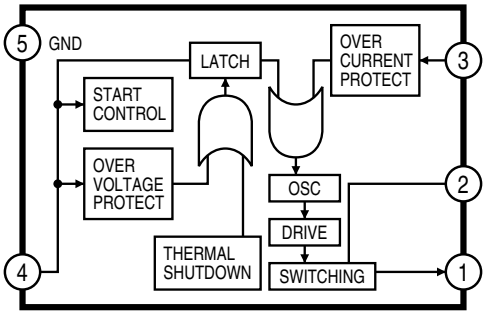
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME
TYPE 3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

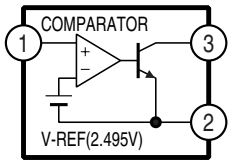
HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.



IC1001
SWITCHING CONTROL
IC- DETAIL BLOCK DIAGRAM



IC1003
SHUNT REGULATOR
IC- DETAIL BLOCK DIAGRAM



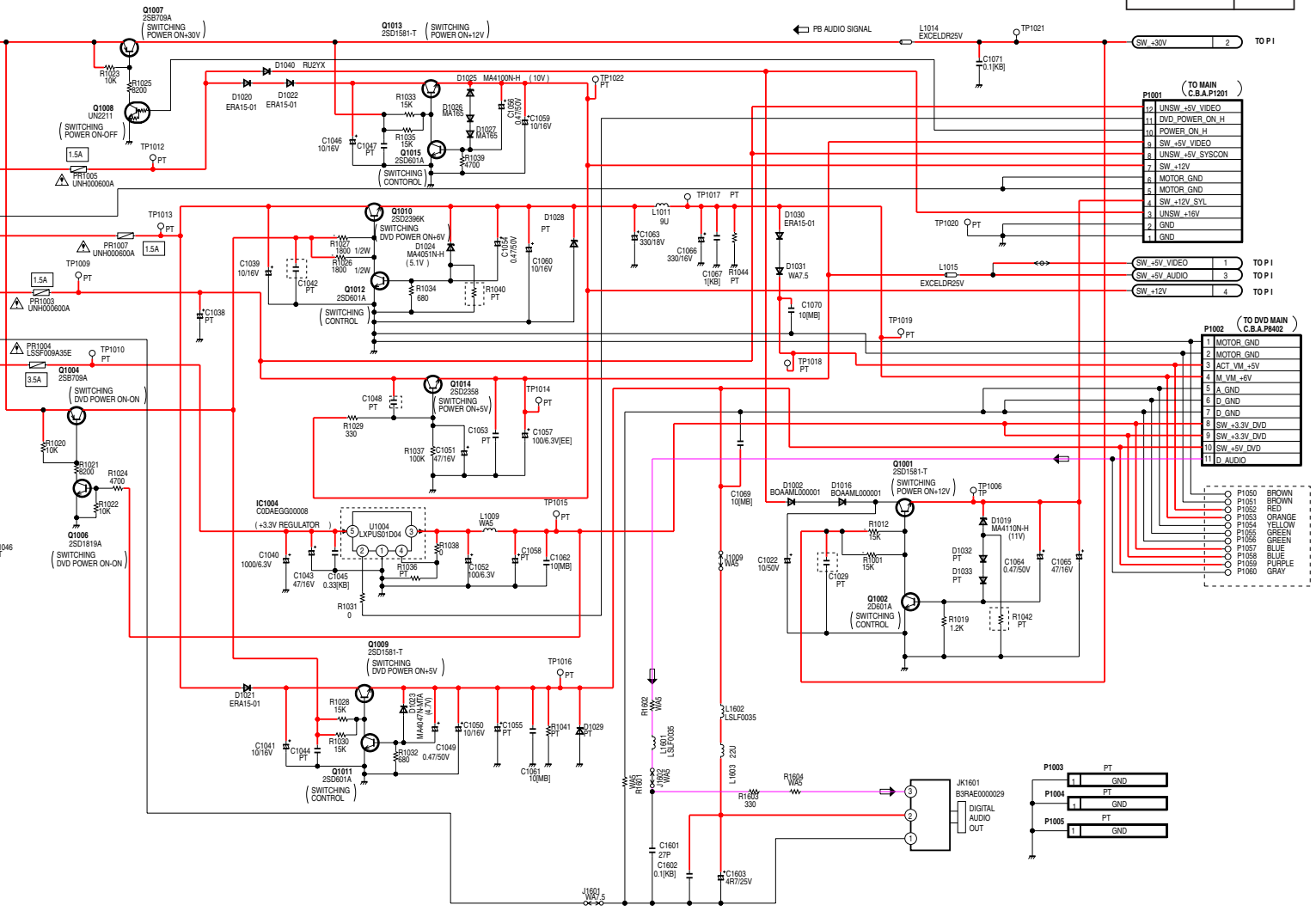
SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



LINK TO VOLTAGE CHART

LSJB2155
POWER SUPPLY II SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

OPERATION SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LA
REFER TO BEGINNING OF SCHEMATIC SECTION.

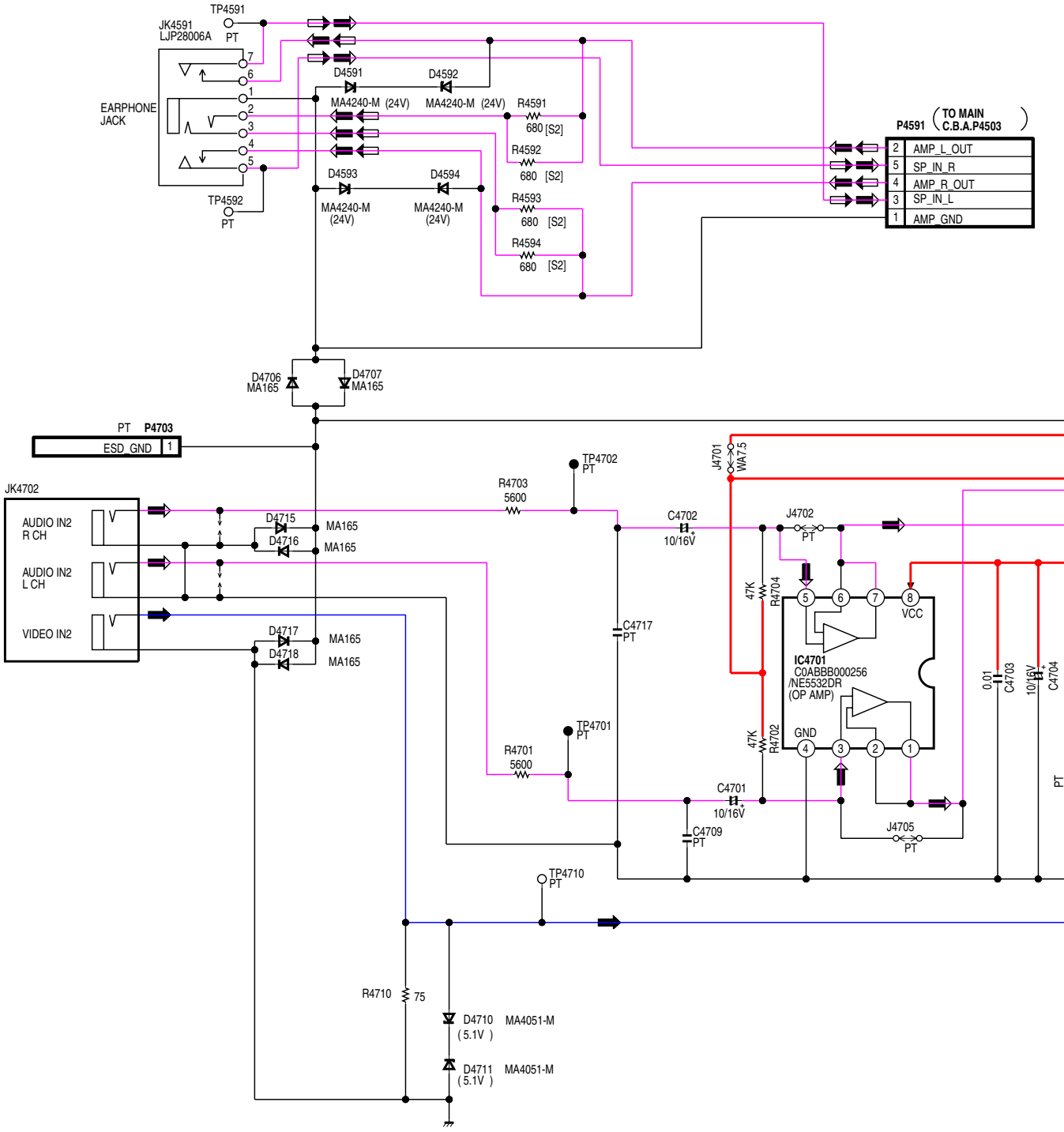
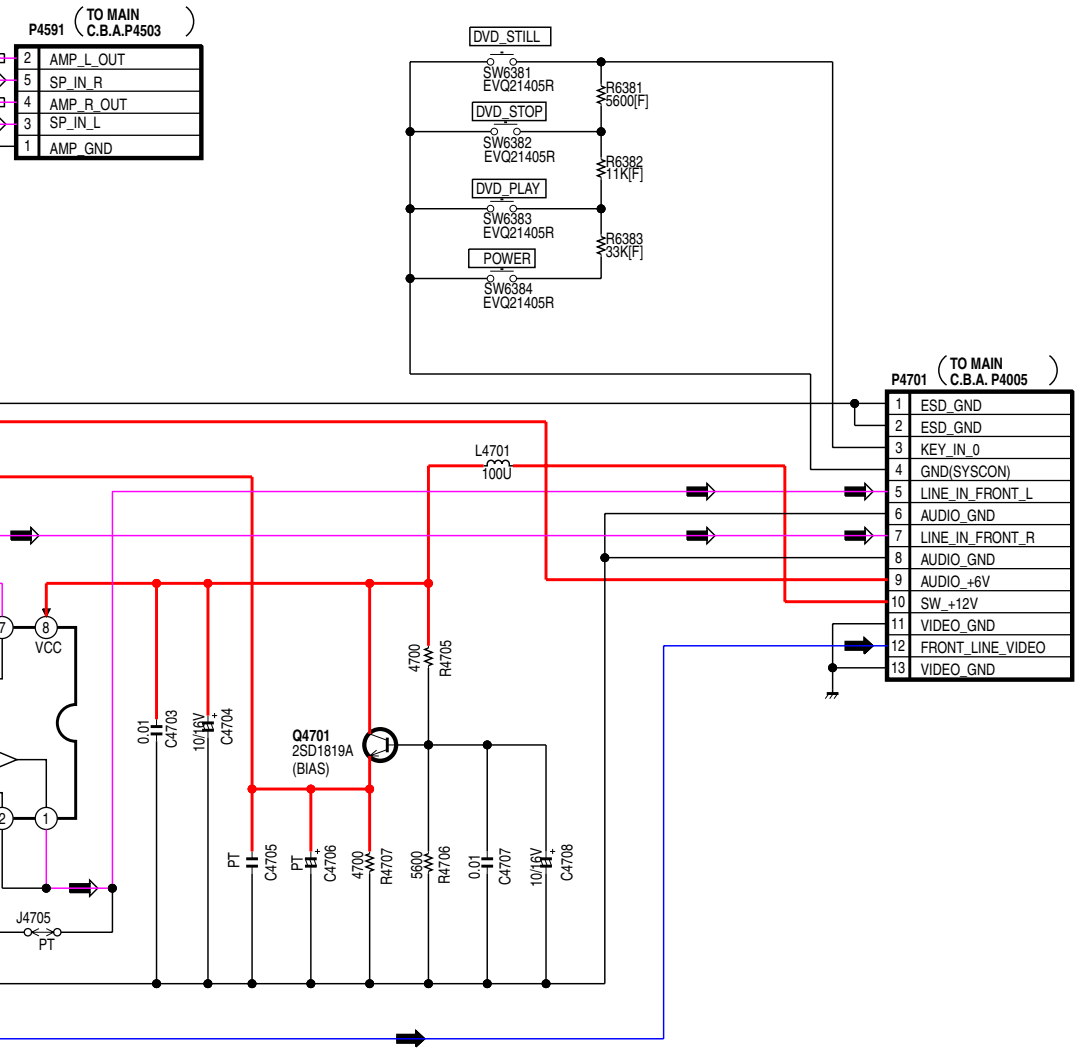


DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
NING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

REC VIDEO SIGNAL REC AUDIO SIGNAL PB AUDIO SIGNAL



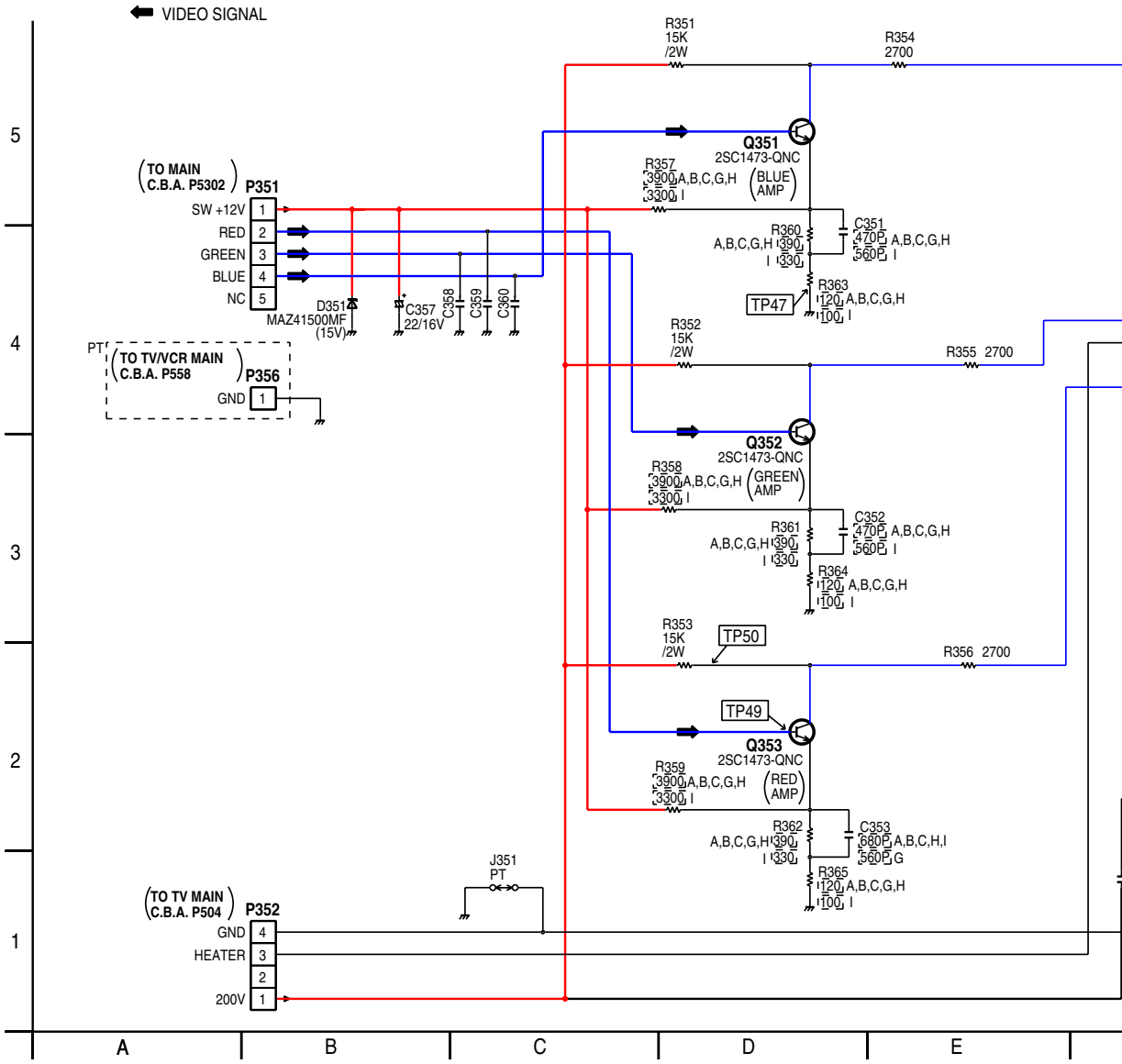
LINK TO VOLTAGE CHART

LSJB2153
OPERATION SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

8.9. CRT SCHEMATIC DIAGRAM (Models:PV-DF204/PV-DF2004/PV-DF2004-K)

CRT SCHEMATIC DIAGRAM (A, B, C, G, H, I)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

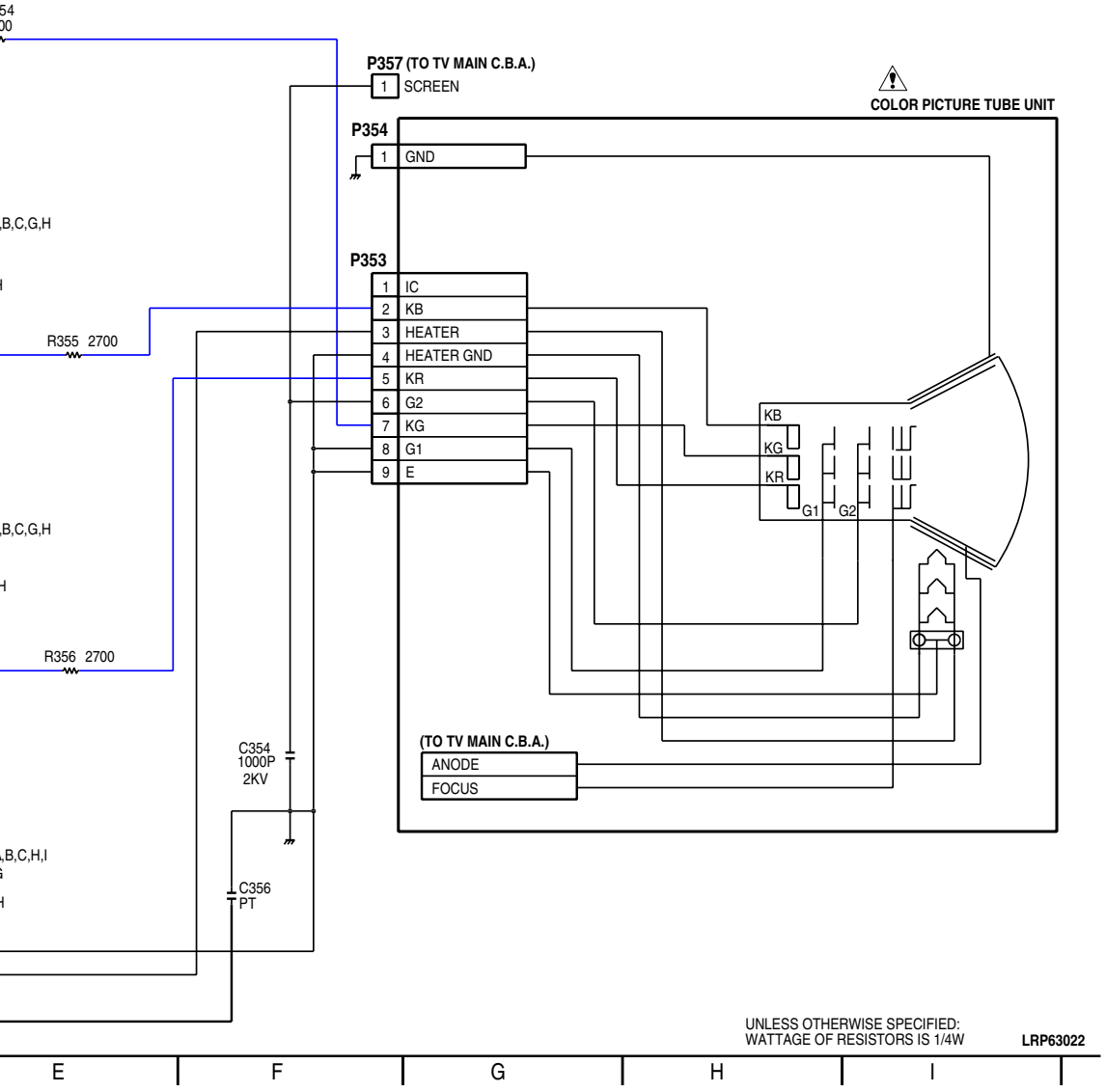
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



UNLESS OTHERWISE SPECIFIED:
WATTAGE OF RESISTORS IS 1/4W

LRP63022

E F G H I

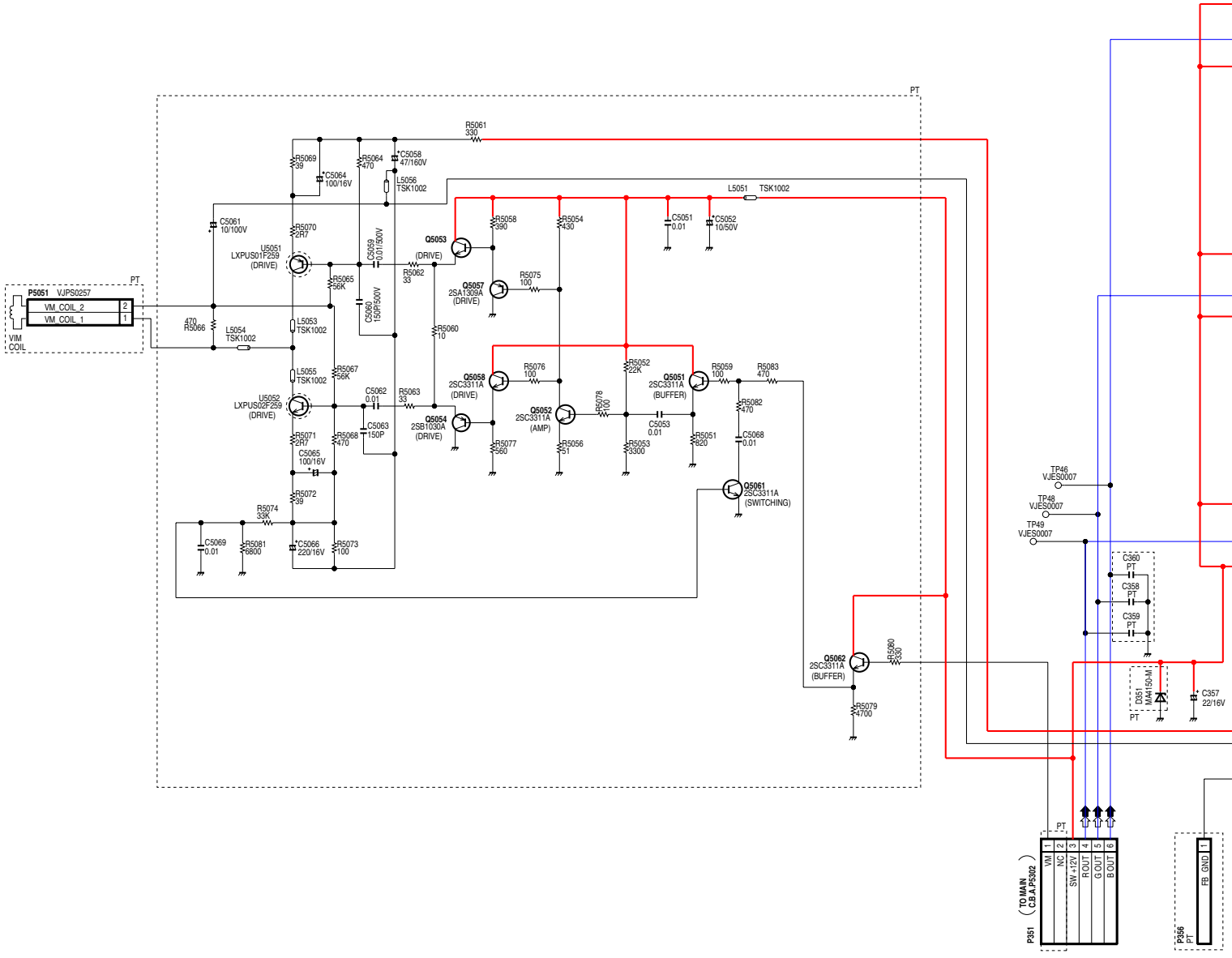
LINK TO VOLTAGE CHART

LRP63022
CRT SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K

8.10. CRT SCHEMATIC DIAGRAM (Models:PV-DF274/PV-DF2704/PV-DF2704-K)

CRT SCHEMATIC DIAGRAM (D, E, F)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



DF2704-K)

SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

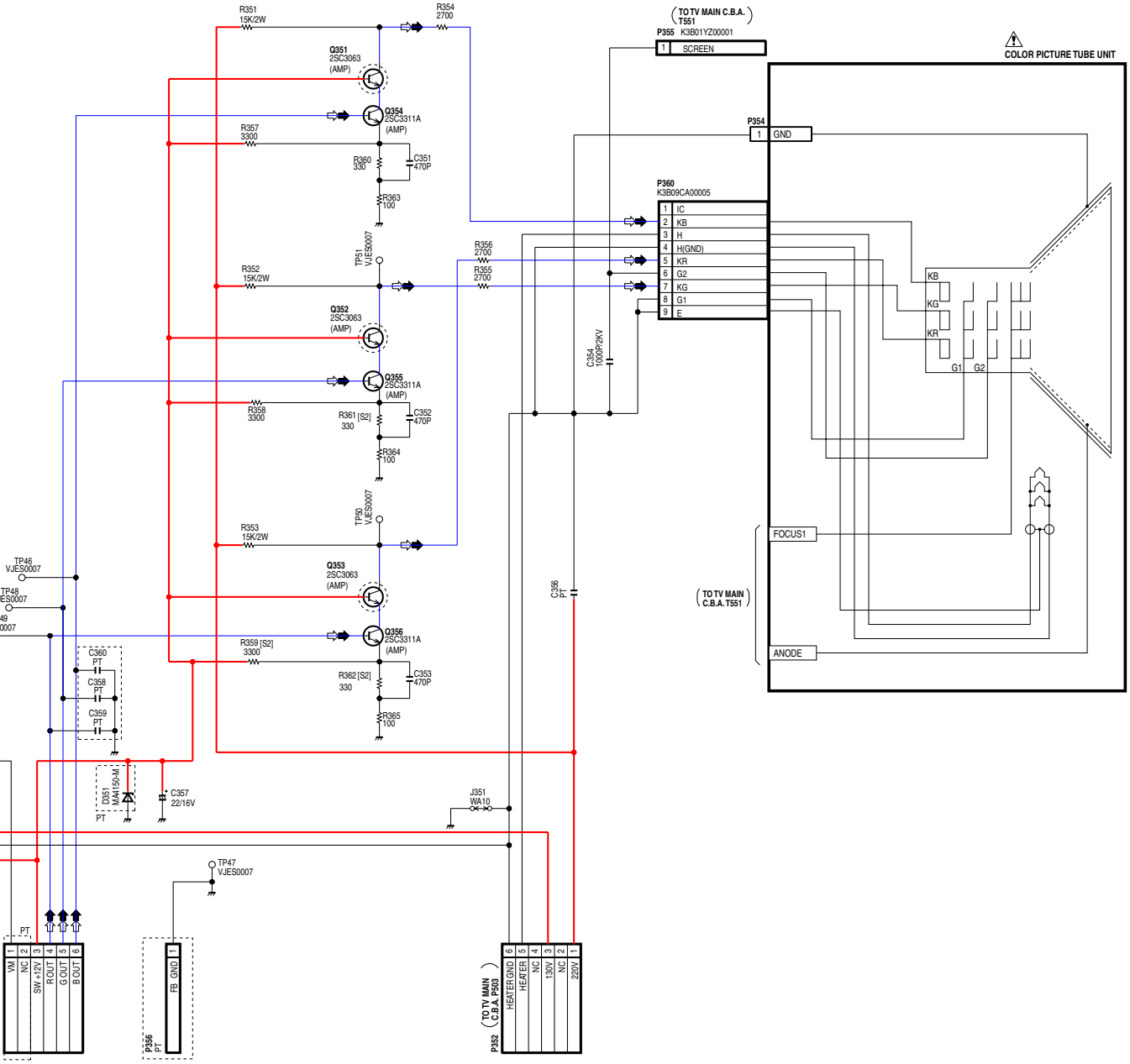
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

REC VIDEO SIGNAL PB VIDEO SIGNAL



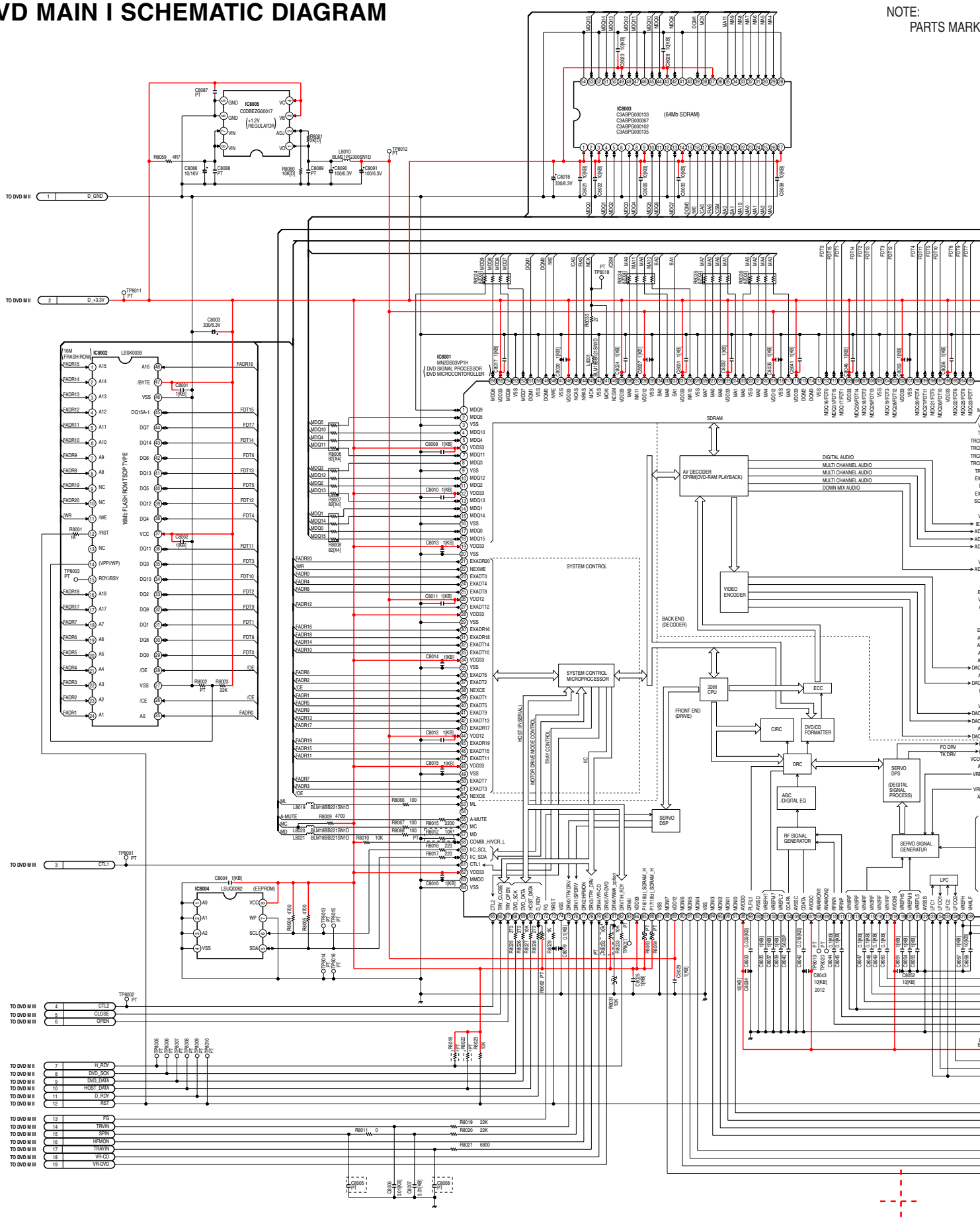
LINK TO VOLTAGE CHART

LSJB2079
CRT SCHEMATIC DIAGRAM
PV-DF274/PV-DF2704/PV-DF2704-K

8.11. DVD MAIN / DVD SUB SCHEMATIC DIAGRAMS

DVD MAIN I SCHEMATIC DIAGRAM

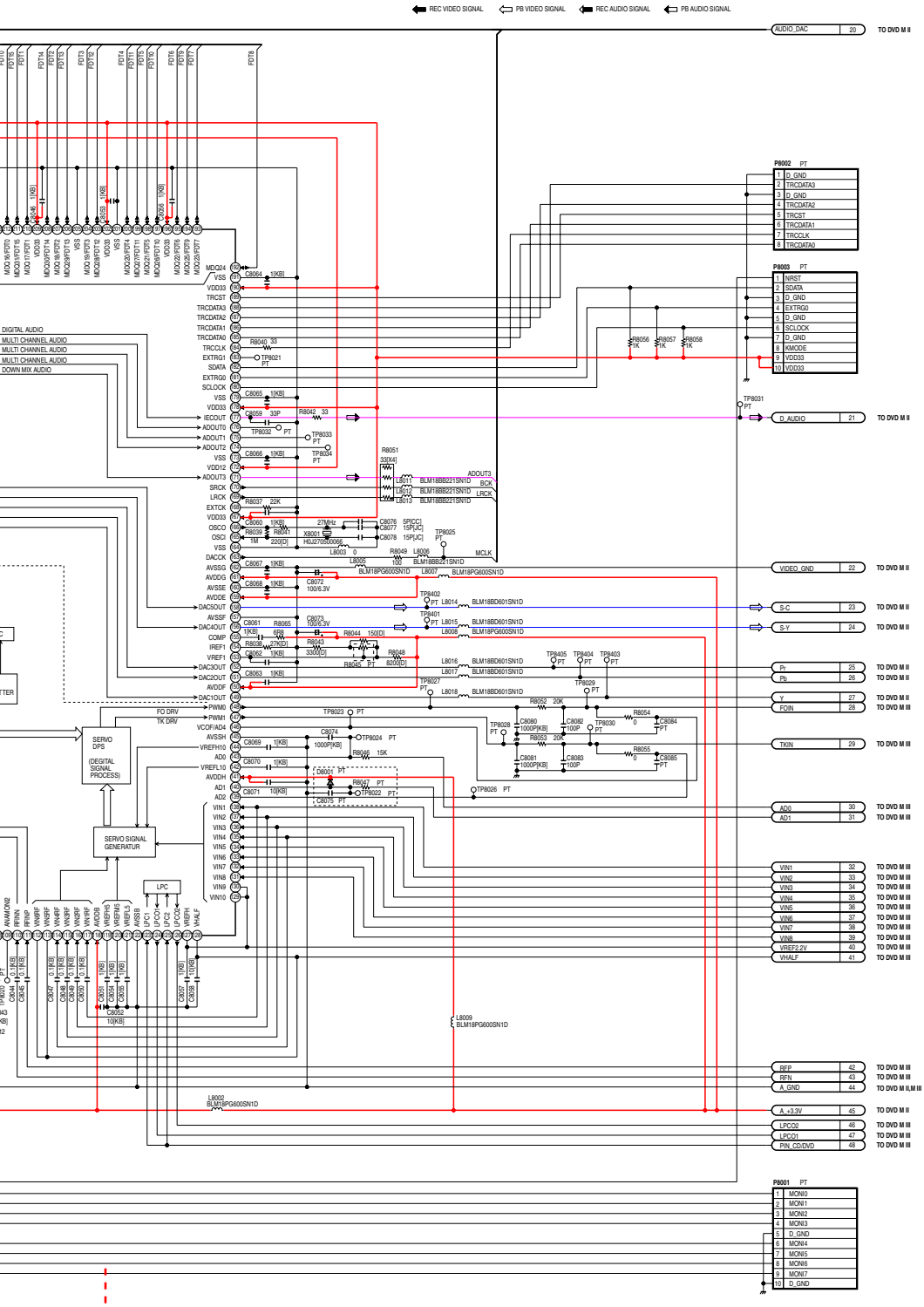
NOTE:
PARTS MARK



NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

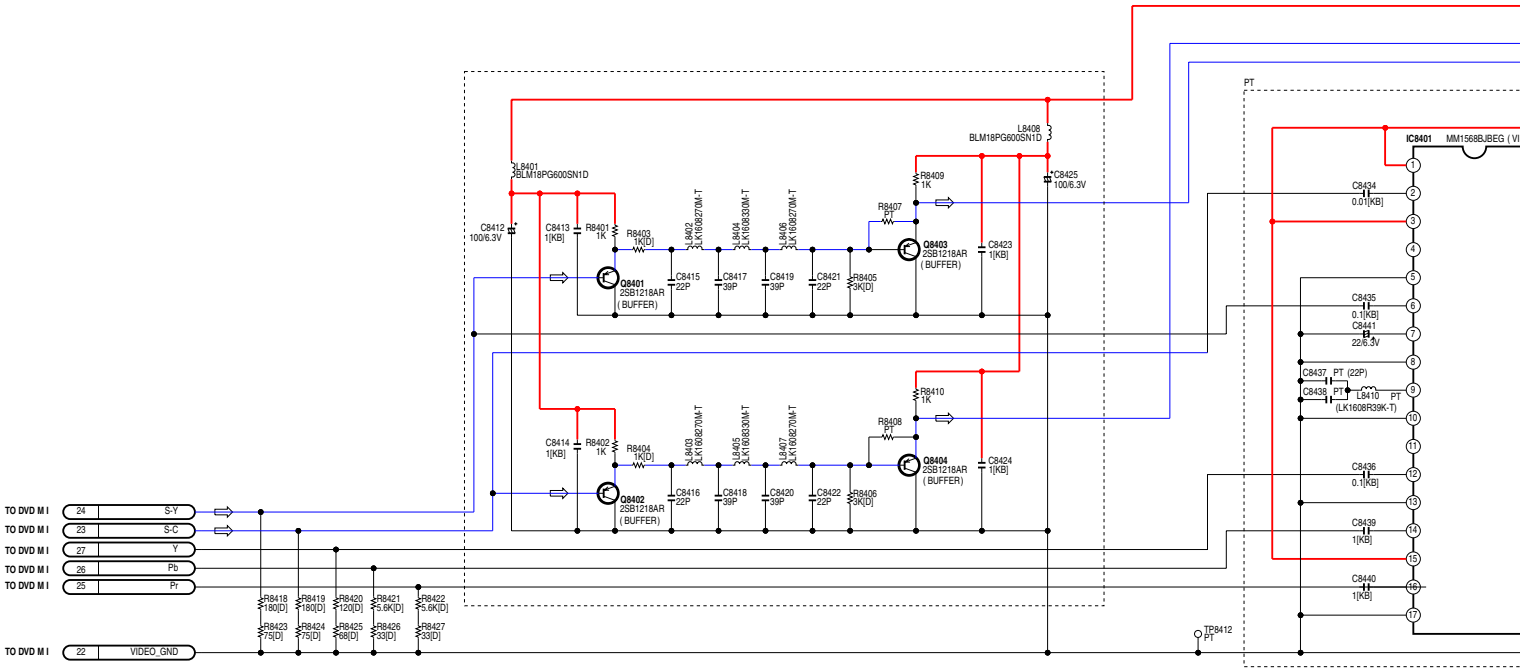
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

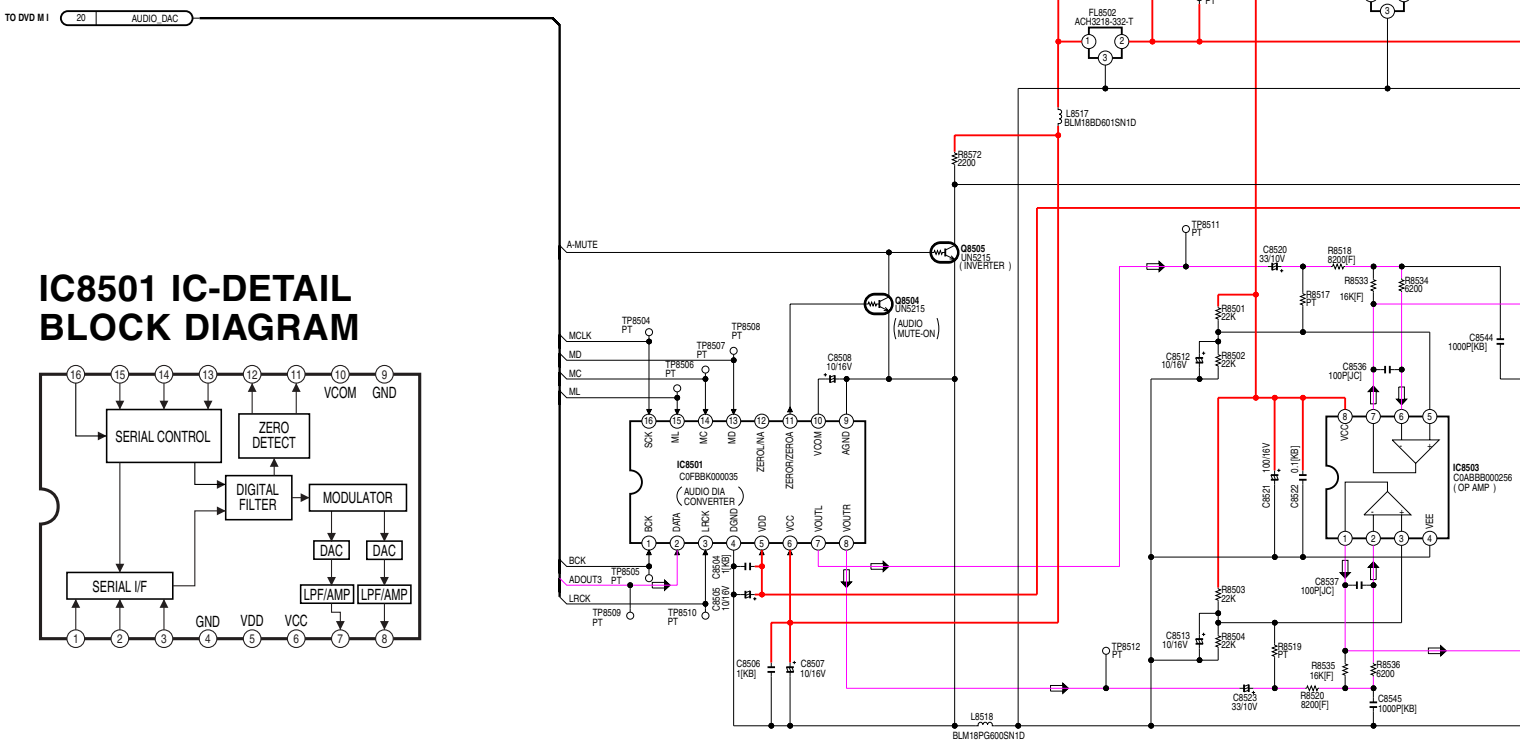


LINK TO VOLTAGE CHART
LSJB2145
DVD MAIN I SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

DVD MAIN II SCHEMATIC DIAGRAM

NOTE:
PARTS MARK





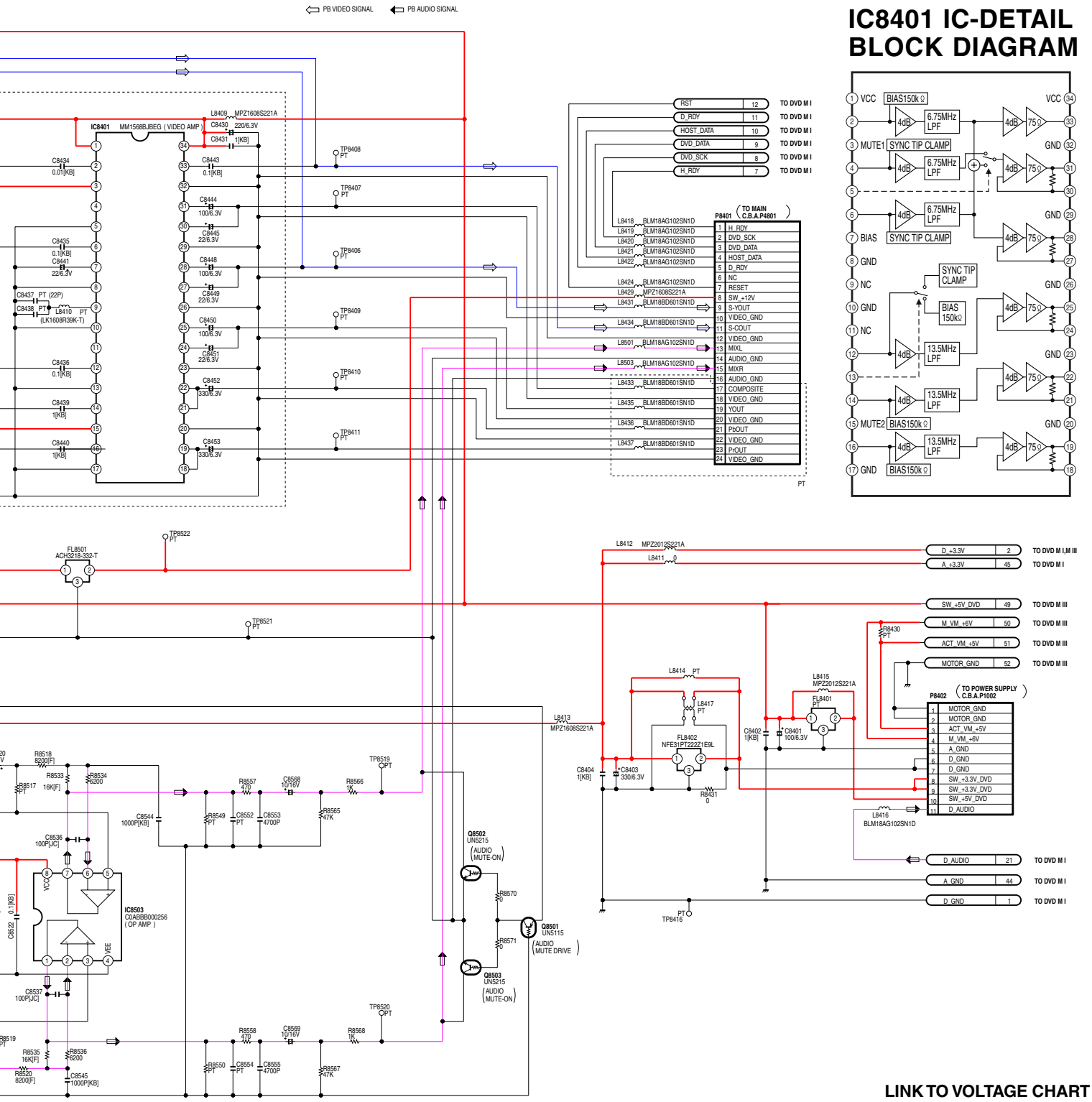
IC8501 IC-DETAIL BLOCK DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IC8401 IC-DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART

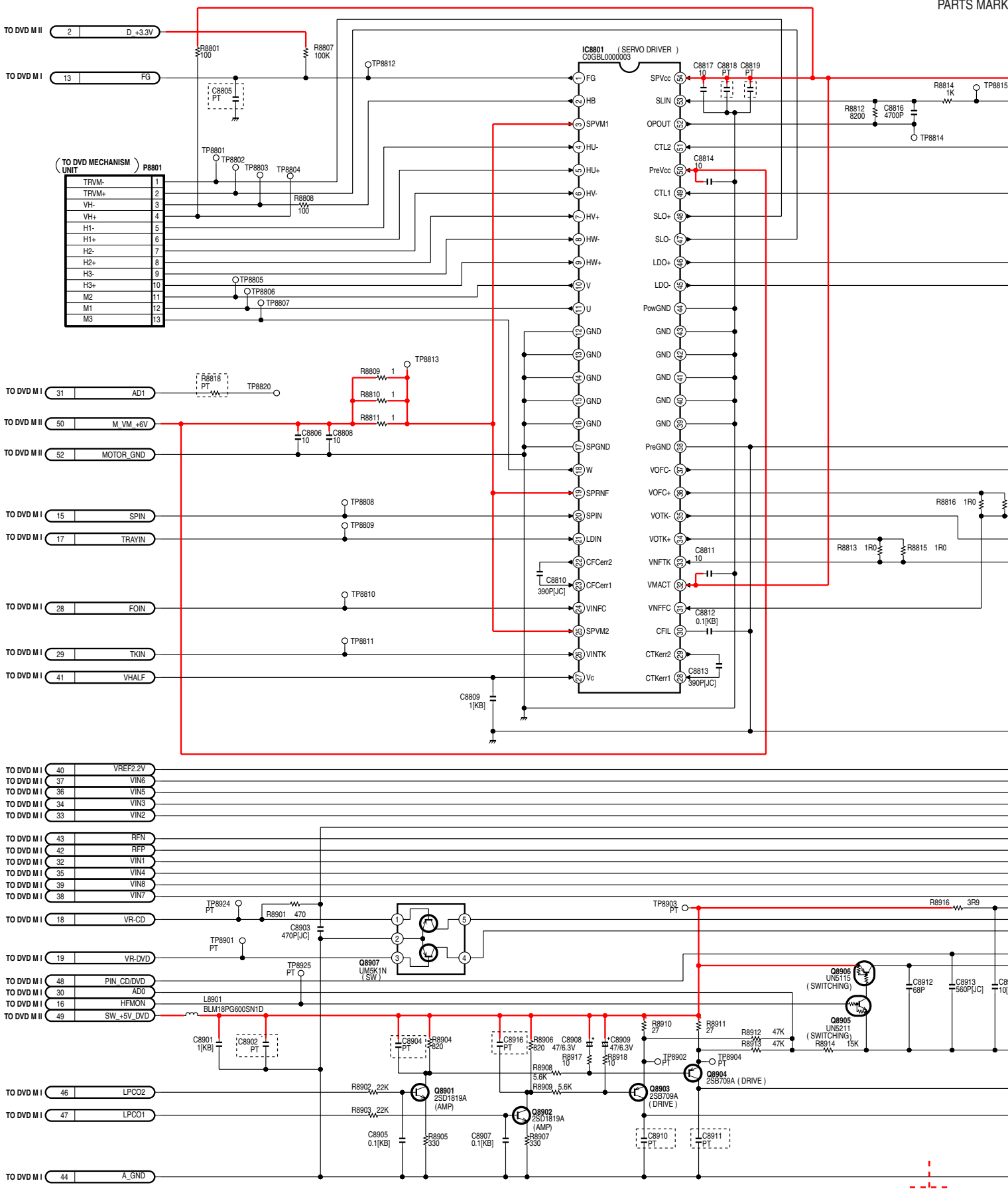
LSJB2145

DVD MAIN II SCHEMATIC DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K /PV-DF274/PV-DF2704/PV-DF2704-K

DVD MAIN III SCHEMATIC DIAGRAM

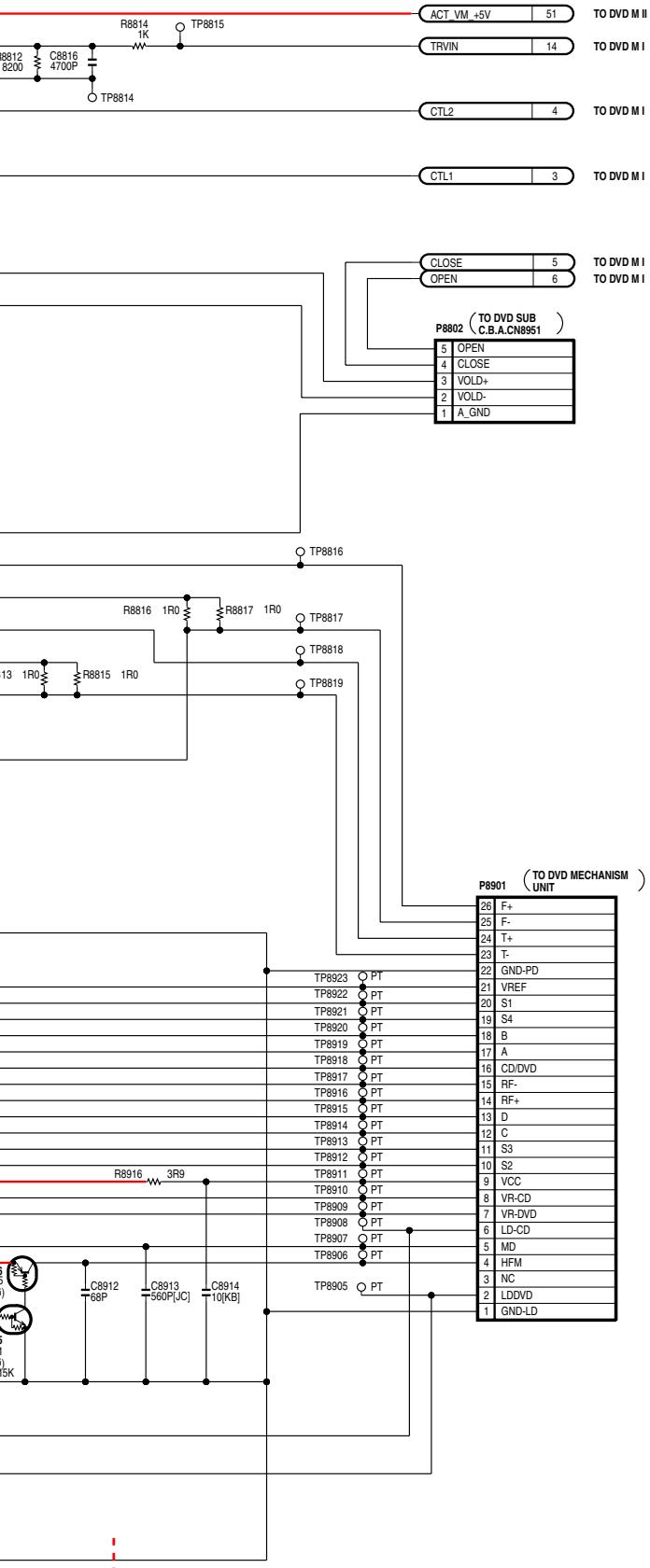
NOTE:
PARTS MARK



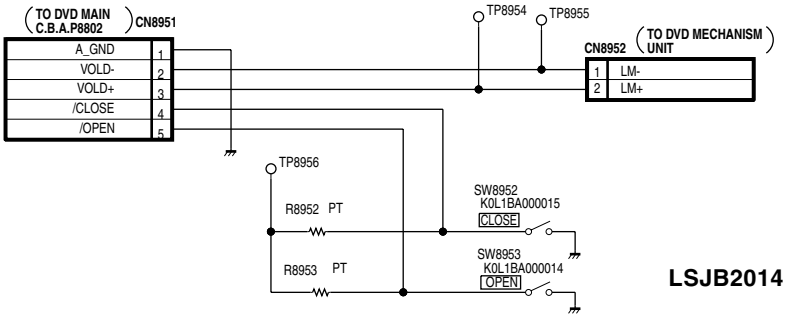
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

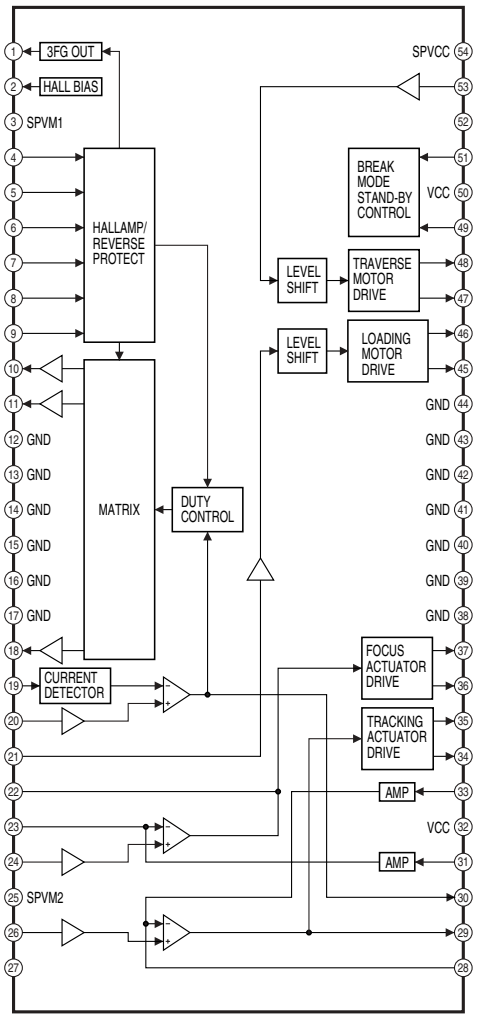


DVD SUB SCHEMATIC DIAGRAM



LSJB2014

IC8801 IC-DETAIL BLOCK DIAGRAM



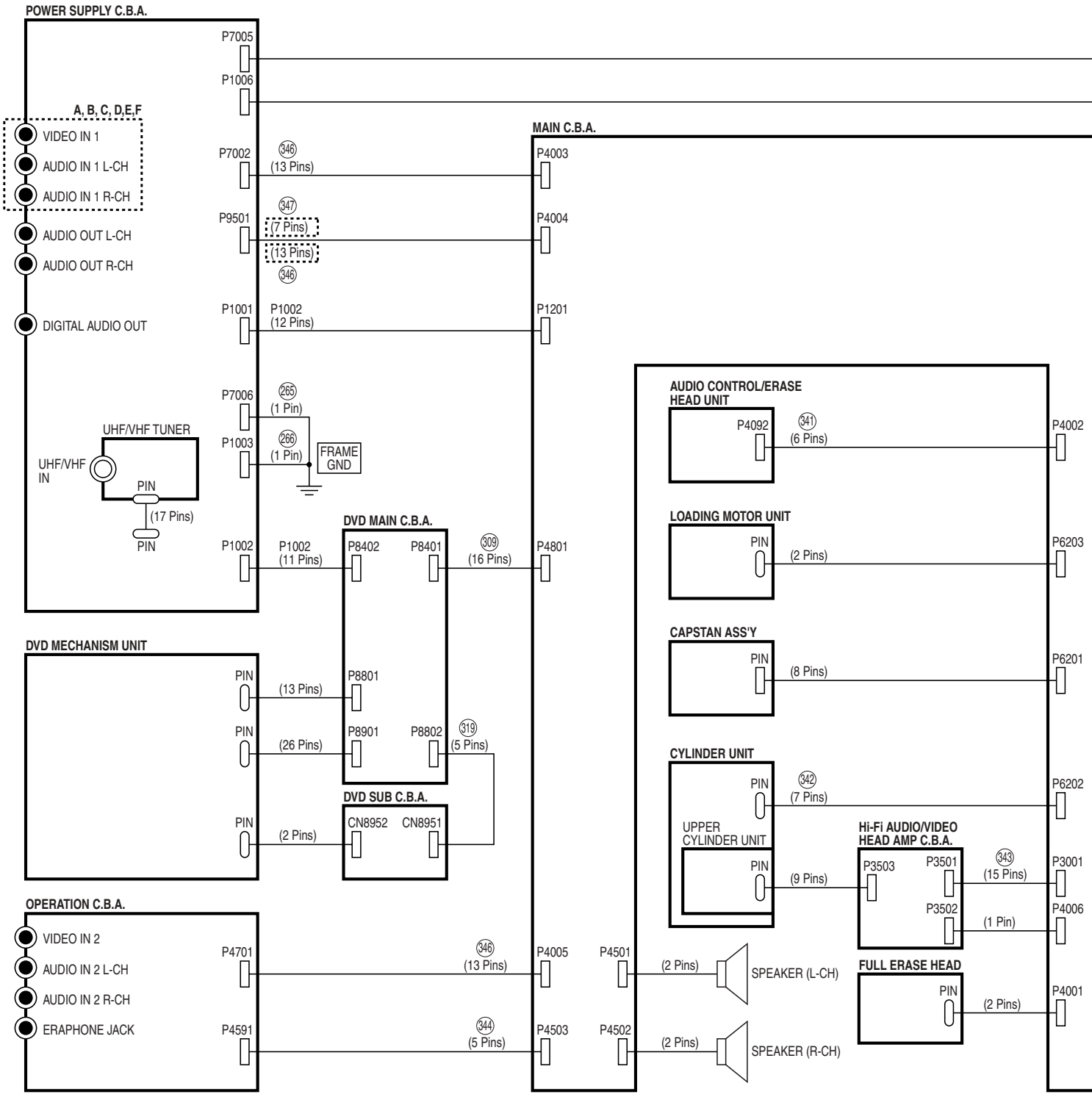
LINK TO VOLTAGE CHART

LSJB2145
DVD MAIN III / DVD SUB SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

8.12. INTERCONNECTION SCHEMATIC DIAGRAM

INTERCONNECTION SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



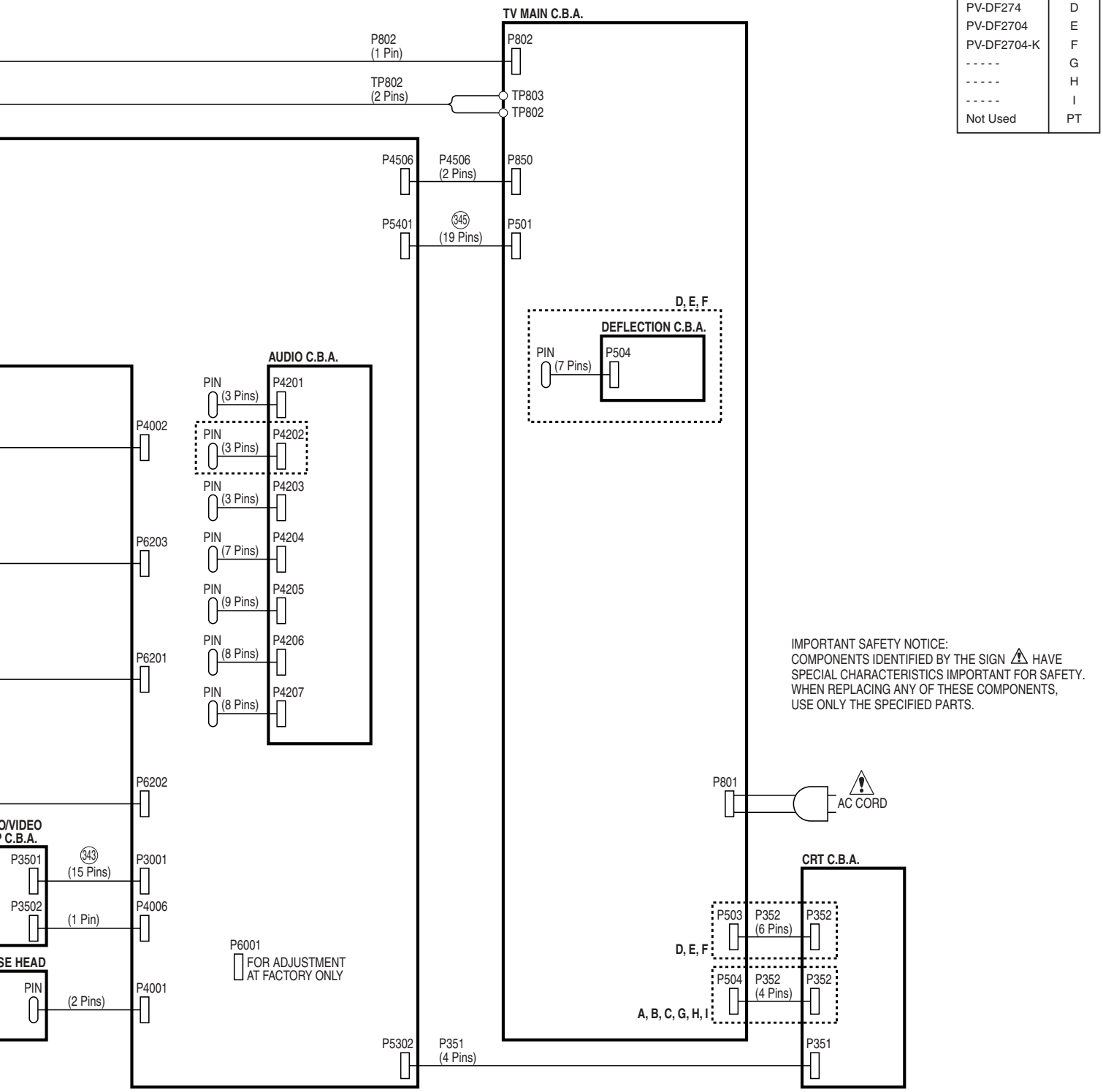
SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

INTERCONNECTION SCHEMATIC DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MAIN C.B.A. (VIDEO/AUDIO SECTION)

MODE / PIN NO.	STOP
IC3001	
1	5.0
2	3.4
3	2.1
4	5.0
5	2.7
6	---
7	5.2
8	5.2
9	2.3
10	2.8
11	0.8
12	2.8
13	0
14	0.4
15	1.0
16	0
17	2.3
18	3.2
19	2.7
20	3.1
21	5.0
22	0
23	2.5
24	2.5
25	0
26	2.5
27	2.0
28	0
29	0
30	1.8
31	2.0
32	2.4
33	0
34	0
35	---
36	0
37	0.1
38	0
39	2.3
40	3.5
41	2.8
42	0
43	0.1
44	2.6
45	2.6
46	2.6
47	5.0
48	---
49	0.1
50	---
51	5.0
52	2.6
53	2.5
54	0.4

MODE / PIN NO.	STOP
55	2.1
56	4.3
57	2.6
58	2.6
59	2.5
60	2.6
61	2.5
62	0
63	0
64	---
65	2.6
66	2.6
67	2.6
68	0.3
69	2.6
70	0.1
71	---
72	2.6
73	2.6
74	0
75	0.1
76	3.4
77	0
78	1.9
79	3.0
80	1.9
81	2.5
82	2.8
83	2.6
84	2.5
IC3201	
1	0.2
2	5.0
3	0.2
4	0
5	2.9
6	-2.8
7	2.1
8	2.9
IC3351	
1	0
2	3.2
3	5.2
4	1.5
5	0
6	2.3
IC4501	
1	10.5
2	0
3	0
4	1.7
5	1.1
6	13.4
7	21.1
8	10.7

MODE / PIN NO.	STOP
9	0
10	0
11	0
12	10.7
13	---
IC4601	
1	4.5
2	4.5
3	4.5
4	4.5
5	4.5
6	4.5
7	4.5
8	2.2
9	4.5
10	5.2
11	4.5
12	4.5
13	2.8
14	3.3
15	2.8
16	0
17	4.5
18	4.5
19	4.5
20	4.5
21	4.5
22	4.5
23	4.5
24	4.5
IC5301	
1	2.7
2	0.1
3	0.1
4	---
5	2.1
6	2.1
7	0.1
8	0.1
9	0
10	3.9
11	0.1
12	0.1
13	4.3
14	6.2
15	0.2
16	0.2
17	0
18	0.2
19	0.2
20	0.2
21	0.2
22	3.8
23	3.8
24	9.1

MODE / PIN NO.	STOP
25	3.6
26	9.0
27	0
28	0
29	0
30	5.8
31	6.3
32	3.5
33	6.4
34	8.2
35	0
36	0.1
37	9.7
38	9.0
39	2.2
40	2.3
41	2.4
42	0
43	5.2
44	5.2
45	---
46	2.7
47	5.0
48	0.7
IC5352	
1	2.3
2	4.3
3	2.5
4	0.1
5	3.2
6	5.0
7	0.3
8	0
IC5651	
1	0
2	2.3
3	2.9
4	2.5
5	1.4
6	0
7	0
8	5.1
9	0
10	2.4
11	2.3
12	3.5
13	3.9
14	1.7
15	3.8
16	5.1
IC5653	
1	3.4
2	0
3	3.4
4	4.9

MODE / PIN NO.	STOP
5	3.4
6	5.0
7	1.4
8	0
Q3001	
E	1.7
C	0
B	1.0
Q3002	
E	1.9
C	5.1
B	2.5
Q3003	
E	2.1
C	5.1
B	2.8
Q3004	
E	1.7
C	0.3
B	1.1
Q3305	
E	0
C	4.0
B	-0.2
Q4001	
E	5.1
C	5.1
B	4.3
Q4002	
E	0
C	0
B	0.8
Q4003	
E	0
C	0
B	0.8
Q4101	
E	0
C	0.6
B	0.5
Q4103	
E	0
C	0.2
B	0.1
Q4104	
E	0
C	5.2
B	0
Q4172	
E	0
C	0
B	4.7
Q5301	
E	3.2

MODE / PIN NO.	STOP
C	9.1
B	3.8
Q5302	
E	5.2
C	9.1
B	5.7
Q5501	
E	1.1
C	0
B	0.3
Q5651	
E	1.9
C	0
B	1.3
Q5652	
E	1.1
C	4.2
B	1.7
Q5653	
E	2.5
C	0
B	1.8
Q5654	
E	0
C	5.1
B	0
Q5655	
E	3.0
C	9.0
B	3.6
Q5656	
E	3.3
C	9.0
B	3.9
Q5657	
E	1.6
C	7.5
B	2.1
Q5658	
E	6.9
C	9.0
B	7.5
Q5659	
E	0
C	0
B	4.7
Q5901	
E	9.1
C	12.1
B	9.7
TP3001	1.8
TP3002	2.5
TP3003	0.3
TP3004	2.5

MODE / PIN NO.	STOP
TP3005	3.4
TP3006	2.5
TP3007	2.6
TP3008	2.4
TP3010	3.0
TP3011	2.7
TP3012	1.7
TP3013	0
TP3014	0
TP3212	2.9
TP4001	6.0
TP4002	0
TP4003	0
TP4004	6.0
TP4011	6.0
TP4014	6.0
TP4501	10.7
TP4502	10.7
TP4508	0
TP4509	0
TP5009	0
TP5019	0
TP5301	3.9
TP5302	4.0
TP5303	4.2
TP5305	4.6
TP5307	0
TP5308	2.5
TP5309	1.7
TP5310	7.3
TP5311	3.8
TP5312	2.3
TP5313	0.2
TP5401	3.8
TP5402	2.2
TP5501	0.8
TP5503	2.3
TP5504	0
TP5505	0
TP5506	5.8
TP5651	2.5
TP5652	6.9

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MAIN C.B.A. (SYSTEM CONTROL/SERVO SECTION)

MODE / PIN NO.	REC	PLAY
IC6001		
1	5.2	5.2
2	5.2	5.2
3	5.2	5.2
5	2.6	0.3
6	2.6	2.6
7	4.9	4.9
8	4.9	4.9
9	3.5	2.1
10	0	0
11	4.9	4.9
12	0.3	0.3
13	0.1	0.2
14	5.2	5.2
15	2.5	2.5
16	0	0
17	0	0
18	2.6	2.6
19	0	2.6
20	5.0	0.2
21	5.2	5.2
22	0.1	5.1
23	0	0
24	0.1	0.6
25	5.2	0
26	0	5.2
27	5.2	5.2
28	5.2	0
29	0	0
30	0	0
31	4.6	0
32	4.7	5.2
33	0	0
34	5.2	5.2
35	0	0
36	5.2	5.2
37	5.2	5.2
38	2.4	2.4
39	2.4	2.4
40	0	0
41	5.0	5.0
42	5.2	5.2
43	5.2	5.2
44	2.5	2.5
45	2.5	2.5
46	0	0
47	0	0
48	5.1	5.1
49	0	0
50	0	0
51	0.6	0.6
52	---	---
53	5.2	5.2
54	2.2	2.2
55	2.6	2.6

MODE / PIN NO.	REC	PLAY
56	0	0
57	0	0
58	0.3	0.3
59	0.4	0.4
60	0	0
61	0	0
62	0.1	0.1
63	0.1	0.1
64	0.1	0.1
65	0	0
66	2.0	2.0
67	2.0	2.0
68	0	0
69	0.3	0.3
70	5.1	5.1
71	3.2	3.2
72	2.8	2.8
73	0	0
74	0.2	0.2
75	0	0
76	2.7	3.2
77	2.6	2.8
78	5.2	5.2
79	---	---
80	---	---
81	5.2	5.2
82	0	0
83	0	0
84	0.1	0.1
85	0.2	0.2
86	2.6	2.6
87	2.6	2.6
88	0	0
89	0.3	0.3
90	1.4	1.4
91	2.6	2.6
92	2.6	2.6
93	1.3	4.3
94	2.4	2.6
95	2.9	2.6
96	2.6	2.6
97	2.6	2.6
98	5.2	5.2
99	5.2	5.2
100	0.3	0.3
IC6002		
A	1.3	1.3
K	0	0
E	0	0
C	---	---
IC6003		
A	2.4	2.4
K	1.3	1.3
E	0	0
C	---	---

MODE / PIN NO.	REC	PLAY
IC6004		
1	0	0
2	0	0
3	0	0
4	0	0
5	5.2	4.8
6	5.2	5.0
7	0	0
8	5.0	5.0
IC6005		
1	5.1	5.2
2	5.0	5.0
3	0	0
4	0	0
5	5.0	5.0
6	0	0
IC6201		
1	11.9	11.9
2	3.1	3.1
3	0	0
4	3.0	3.0
5	0.1	0.1
6	0.1	0.1
7	16.7	16.7
8	0	0
9	2.9	2.9
10	1.7	1.7
11	1.7	1.7
12	0.7	0.7
13	0	0
14	2.6	2.6
15	2.7	2.7
16	2.7	2.7
17	2.7	2.7
18	1.4	1.4
19	5.2	5.2
20	3.7	3.7
21	11.9	11.9
22	3.8	3.8
23	3.8	3.8
24	0	0
25	3.8	3.8
26	0	0
27	0	0
Q6001		
E	12.1	12.2
C	11.9	0.6
B	11.3	12.3
Q6002		
E	4.4	0
C	11.3	12.2
B	5.0	0
Q6003		
E	0	0

MODE / PIN NO.	REC	PLAY
C	0.1	0.2
B	0.6	0.6
Q6004		
E	5.0	5.1
C	5.0	5.1
B	4.3	4.4
Q6005		
E	5.1	5.2
C	5.0	5.1
B	4.3	4.3
Q6006		
E	0	0
C	5.0	0
B	0	0
Q6009		
E	0.1	0.1
C	5.0	5.0
Q6010		
E	0.1	0.1
C	4.8	5.1
Q6215		
E	5.6	5.6
C	5.2	5.2
B	5.0	5.0
Q6216		
E	0	0
C	5.6	5.6
B	0.7	0.7
Q6217		
E	5.0	5.0
C	11.9	11.9
B	5.6	5.6
Q6301		
E	4.5	4.5
C	5.1	5.1
B	5.2	5.2
TP6001	4.9	4.9
TP6002	4.9	4.9
TP6003	3.5	2.1
TP6004	---	---
TP6005	---	---
TP6006	0	0
TP6007	5.1	5.1
TP6008	0	0
TP6009	5.2	5.2
TP6013	0	0
TP6019	4.9	4.9
TP6101	5.2	5.2
TP6104	5.2	5.2
TP6106	5.2	5.2
TP6111	0	0
TP6201	2.7	3.2
TP6202	2.6	2.8
TP6203	2.6	2.6

MODE / PIN NO.	REC	PLAY
TP6205	2.6	2.6
TP6206	2.9	2.6
TP6207	2.6	2.5
TP6208	2.6	2.7
TP6209	2.4	2.4

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

TV MAIN C.B.A.

MODE / PIN NO.	STOP
IC451	
1	10.2
2	3.9
3	5.1
4	6.2
5	0
6	5.1
7	4.6
8	27.2
9	2.3
10	1.2
11	0
12	14.7
13	27.7
IC850	
1	2.0
2	0.2
3	124.9
4	17.0
5	0
Q431	
E	0
C	0
B	0.3
Q501	
E	0
C	80.1
B	0.4
Q523	
E	130
C	0.2
B	129.6
Q541	
E	4.4
C	0.2
B	3.9
Q551	
E	0
C	---
B	0
Q571	
E	1.4
C	11.7
B	1.7
Q591	
E	0
C	12.2
B	0
Q801	
E	0
C	0.2
B	0.8

MODE / PIN NO.	STOP
TP501	140.4
TP502	0.1
TP503	0
TP541	0
TP551	-2.4
TP552	-19.6
TP553	0.1
TP554	23.7
TP556	213.5
TP558	17.1
TP802	120.0
TP803	120.0
TP809	0
TP810	0.2
TP851	130.0
TP852	0

DEFLECTION C.B.A. (D, E, F)

MODE / PIN NO.	STOP
IC752	
1	3.0
2	3.7
3	3.7
4	0
5	5.3
6	0.1
7	6.9
8	12.0
Q751	
E	0.1
C	23.4
B	0.6
Q753	
E	7.4
C	0.6
B	6.9
Q754	
E	1.8
C	7.4
B	2.4
TP751	3.0
TP752	6.5

POWER SUPPLY C.B.A.

MODE / PIN NO.	STOP
IC1001	
1	173.6
2	0.4
3	0
4	20.8
5	2.3
IC1002	
1	5.1
2	4.1
3	4.5
4	20.8
IC1003	
1	2.5
2	0
3	4.1
IC1004	
1	0
2	5.1
3	3.3
4	3.3
5	0
IC9501	
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	5.1
Q1004	
E	31.1
C	1.0
B	30.3
Q1006	
E	0
C	0
B	0.7
Q1007	
E	31.1
C	30.3
B	30.6
Q1008	
E	0
C	30.6
B	-0.1
Q1009	
E	5.1
C	0
B	5.6
Q1010	
E	0.1
C	12.2

MODE / PIN NO.	STOP
B	0
Q1011	
E	0
C	5.6
B	0.7
Q1012	
E	0
C	0
B	0
Q1013	
E	12.2
C	14.4
B	12.7
Q1014	
E	5.2
C	5.3
B	6.0
Q1015	
E	0
C	12.7
B	0.6
Q9501	
E	6.0
C	12.0
B	0
TP1006	11.9
TP1008	31.1
TP1009	5.2
TP1010	4.6
TP1012	14.4
TP1013	12.2
TP1014	5.2
TP1015	3.3
TP1016	5.1
TP1017	6.0
TP1018	5.7
TP1019	0
TP1020	0
TP1021	30.3
TP1022	12.2
TP9501	0
TP9551	0
TP9552	0
TP9553	0
TP9554	0

AUDIO C.B.A.

MODE / PIN NO.	STOP
IC4201	
1	0.4
2	0
3	2.5
4	0
5	2.5
6	2.5
7	2.2
8	0.4
9	0
10	0
11	0
12	2.2
13	2.6
14	0
15	0
16	2.6
17	0.8
18	2.6
19	2.5
20	2.1
21	---
22	2.1
23	0
24	2.1
25	5.0
26	2.1
27	0
28	3.8
29	1.5
30	0.8
31	0.1
32	2.5
33	2.5
34	0.7
35	2.5
36	0.1
37	1.7
38	0
39	---
40	5.0
41	0
42	4.9
43	4.9
44	0
45	0
46	0
47	2.5
48	2.3
49	0.4
50	3.6
51	5.0
52	3.6
53	6.0
54	2.5

MODE / PIN NO.	STOP
55	0
56	0
57	6.0
58	12.0
59	---
60	0.2
61	2.5
62	2.5
63	2.8
64	0.6
Q4003	
E	0.3
C	---
B	0
Q4004	
E	0.3
C	---
B	0
Q4005	
E	0
C	0
B	---
Q4006	
E	0
C	0
B	---
TP4201	0
TP4202	0
TP4205	0
TP4206	0
TP4207	0
TP4208	0
TP4209	0.4

VOLTAGE CHART
PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

OPERATION C.B.A.

MODE / PIN NO.	STOP
IC4701	
1	0
2	0
3	0
4	6.4
5	0
6	0
7	0
8	5.0
Q4701	
E	6.5
C	12.0
B	0.1
TP4591	0
TP4592	0
TP4701	0
TP4702	0
TP4710	0

Hi-Fi AUDIO/VIDEO HEAD AMP C.B.A.

MODE / PIN NO.	STOP
IC3501	
1	0
2	0
3	0.5
4	0
5	0
6	0
7	0.5
8	0
9	0
10	0.5
11	0
12	0
13	0.1
14	0.1
15	---
16	2.4
17	2.4
18	0
19	---
20	---
21	---
22	---
23	---
24	---
25	0.2
26	5.1
27	0
28	0
29	0
30	2.5
31	5.2
32	4.9
33	0.2
34	0.1
35	11.9
36	0.1
IC4401	
1	0
2	4.0
3	0.6
4	0
5	4.0
6	4.0
7	1.0
8	0.7
9	2.6
10	5.1
11	0
12	0
13	3.9
14	3.9
15	0.1
16	13.0

CRT C.B.A. (A,B,C,G,H,I)

MODE / PIN NO.	STOP
Q351	
E	3.1
C	131.1
B	3.5
Q352	
E	3.1
C	127.9
B	3.5
Q353	
E	3.0
C	131.9
B	3.5
TP47	0
TP49	3.5
TP50	131.9

CRT C.B.A. (D,E,F)

MODE / PIN NO.	STOP
Q351	
E	12.3
C	142.3
B	12.0
Q352	
E	12.2
C	204.5
B	12.0
Q353	
E	12.2
C	199.5
B	12.0
Q354	
E	0.1
C	12.2
B	4.2
Q355	
E	2.1
C	12.2
B	2.6
Q356	
E	2.2
C	12.3
B	2.7
TP46	4.2
TP47	0
TP48	2.6
TP49	2.7
TP50	199.4
TP51	204.6

DVD MAIN C.B.A.

MODE / PIN NO.	STOP
IC8001	
1	---
2	---
3	0
4	---
5	---
6	3.3
7	---
8	---
9	0
10	---
11	---
12	3.3
13	---
14	---
15	---
16	0
17	---
18	---
19	3.3
20	0
21	3.4
22	3.4
23	---
24	---
25	---
26	1.2
27	---
28	3.3
29	0
30	0.4
31	0.9
32	---
33	---
34	3.3
35	0
36	---
37	---
38	2.2
39	---
40	---
41	---
42	---
43	0.3
44	1.2
45	0.1
46	---
47	---
48	3.3
49	0
50	---
51	---
52	2
53	3.3
54	---

MODE / PIN NO.	STOP
55	---
56	3.4
57	3.4
58	3.3
59	3.3
60	3.4
61	---
62	3.3
63	0
64	0
65	---
66	3.4
67	3.4
68	---
69	3.4
70	---
71	0.1
72	1.2
73	3.4
74	0
75	1.7
76	2.4
77	---
78	0.1
79	---
80	3.4
81	
82	3.1
83	---
84	3.3
85	---
86	---
87	0
88	---
89	1.2
90	3.4
91	3.4
92	3.4
93	0
94	---
95	---
96	---
97	---
98	3.3
99	0.9
100	0
101	2.4
102	2.2
103	1.9
104	0.3
105	0
106	1.4
107	3.3
108	2.1
109	---

MODE / PIN NO.	STOP
110	1.9
111	1.9
112	1.7
113	1.7
114	1.7
115	1.7
116	1.7
117	1.7
118	3.3
119	2.0
120	1.7
121	1.5
122	0
123	0.4
124	1.2
125	0.4
126	0.2
127	2.3
128	1.7
129	2.3
130	2.2
131	2.4
132	2.4
133	2.4
134	2.4
135	2.0
136	2.0
137	2.0
138	2.0
139	1.8
140	---
141	3.4
142	1.3
143	---
144	2.1
145	0
146	0.5
147	1.7
148	1.7
149	0.7
150	0
151	0.5
152	0.5
153	1.4
154	1.4
155	2.2
156	0.5
157	0
158	0.9
159	3.3
160	0
161	3.3
162	0
163	1.8
164	0

MODE / PIN NO.	STOP
165	1.7
166	1.7
167	3.3
168	1.6
169	1.8
170	1.7
171	1.4
172	1.3
173	0
174	0
175	0
176	0
177	1.7
178	3.3
179	0
180	---
181	---
182	---
183	---
184	---
185	---
186	---
187	---
188	---
189	---
190	3.3
191	0
192	---
193	1.5
194	---
195	---
196	3.3
197	---
198	---
199	---
200	---
201	0
202	3.3
203	---
204	---
205	0
206	---
207	---
208	---
209	3.3
210	---
211	---
212	---
213	0
214	2.4
215	2.4
216	3.3
217	---
218	0
219	1.3

MODE / PIN NO.	STOP
220	---
221	---
222	0
223	---
224	---
225	3.3
226	---
227	---
228	---
229	0
230	---
231	3.3
232	1.7
233	---
234	2.3
235	0
236	1.3
237	---
238	---
239	3.3
240	3.0
241	3.3
242	0
243	1.9
244	3.3
245	3.2
246	3.3
247	0
248	0
249	2.4
250	0
251	1.5
252	---
253	0
254	---
255	3.3
256	---
IC8002	
1	---
2	---
3	---
4	---
5	---
6	---
7	---
8	---
9	0.1
10	3.4
11	3.4
12	3.4
13	---
14	3.3
15	0.9
16	0.9
17	0.3

MODE / PIN NO.	STOP
18	---
19	---
20	---
21	---
22	---
23	---
24	---
25	---
26	2.2
27	0
28	2.0
29	---
30	---
31	---
32	---
33	---
34	---
35	---
36	---
37	3.3
38	---
39	---
40	---
41	---
42	---
43	---
44	---
45	---
46	0
47	3.3
48	0.4
IC8003	
1	3.3
2	---
3	3.3
4	---
5	---
6	0
7	---
8	---
9	3.3
10	---
11	---
12	0
13	---
14	3.3
15	2.4
16	0
17	3.2
18	3.3
19	3.0
20	2.3
21	1.7
22	---
23	---

VOLTAGE CHART
PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MODE / PIN NO.	STOP
24	---
25	---
26	---
27	3.3
28	0
29	---
30	---
31	---
32	---
33	---
34	---
35	---
36	---
37	3.3
38	3.3
39	1.5
40	---
41	0
42	---
43	3.3
44	---
45	---
46	0
47	---
48	---
49	3.3
50	---
51	---
52	0
53	---
54	0
IC8004	
1	0
2	0
3	0
4	0
5	3.3
6	3.2
7	0
8	3.3
IC8005	
1	1.2
2	1.1
3	3.3
4	3.3
5	0
6	0
7	2.2
8	2.2
IC8501	
1	1.7
2	0.1
3	1.7
4	0
5	3.3

MODE / PIN NO.	STOP
6	5.0
7	0.1
8	0.1
9	0
10	0
11	---
12	---
13	1.6
14	0.4
15	3.3
16	0.3
IC8503	
1	6.2
2	1.0
3	6.2
4	0
5	6
6	6
7	0.1
8	12
IC8801	
1	2.3
2	5.9
3	6.1
4	5.9
5	5.9
6	5.9
7	0.1
8	5.9
9	5.9
10	2.7
11	2.7
12	0
13	0
14	0
15	0
16	0
17	0
18	2.7
19	6.1
20	1.7
21	0.8
22	0.5
23	0.9
24	1.0
25	6.1
26	1.0
27	1.7
28	0.9
29	0.6
30	0.8
31	0.8
32	5.0
33	0.8
34	0.8

MODE / PIN NO.	STOP
35	0.8
36	0.7
37	0.7
38	0
39	0
40	0
41	0
42	0
43	0
44	0
45	0.9
46	0.9
47	0.8
48	0.8
49	0.1
50	6.0
51	0.1
52	1.7
53	1.7
54	5.0
Q8401	
E	0.5
C	0
B	1.2
Q8402	
E	0
C	0
B	1.8
Q8403	
E	0.9
C	0
B	1.6
Q8404	
E	1.4
C	0
B	2.1
Q8501	
E	0
C	3.3
B	3.3
Q8502	
E	3.3
C	0
B	0
Q8503	
E	3.3
C	0
B	0
Q8504	
E	0
C	0
B	0.1
Q8505	
E	0.1
C	3.3

MODE / PIN NO.	STOP
B	0
Q8901	
E	0.1
C	0
B	0
Q8902	
E	5.1
C	0
B	5.1
Q8903	
E	5.1
C	0
B	5.1
Q8904	
E	5.1
C	0
B	5.1
Q8905	
E	0
C	3.9
B	0.3
Q8906	
E	5.0
C	5.1
B	0.1
Q8907	
1	0.5
2	0
3	0.2
4	0.1
5	0.1
TP8001	0
TP8002	0
TP8003	2.2
TP8005	4.4
TP8006	3.4
TP8007	3.4
TP8008	4.8
TP8009	2.9
TP8010	3.5
TP8011	3.3
TP8012	1.3
TP8013	3.3
TP8014	0
TP8015	3.3
TP8016	0
TP8017	0
TP8018	1.7
TP8019	1.8
TP8020	1.7
TP8021	0
TP8022	1.6
TP8023	1.4
TP8024	2.0

MODE / PIN NO.	STOP
TP8025	1.7
TP8026	1.5
TP8027	1.6
TP8028	1.6
TP8029	1.5
TP8030	1.5
TP8031	1.7
TP8032	0.1
TP8033	0.1
TP8034	0.1
TP8401	0.5
TP8402	1.2
TP8403	0.4
TP8404	0.5
TP8405	0.5
TP8406	1.6
TP8407	0
TP8408	2.1
TP8409	0
TP8410	0
TP8411	0
TP8412	0
TP8416	0
TP8504	0
TP8505	1.6
TP8506	3.3
TP8507	3.1
TP8508	3.3
TP8509	0
TP8510	1.7
TP8511	2.6
TP8512	2.6
TP8519	6.0
TP8520	6.0
TP8521	0
TP8522	12.0
TP8523	5.1
TP8801	0.8
TP8802	0.6
TP8803	5.7
TP8804	5.6
TP8805	1.8
TP8806	1.8
TP8807	1.8
TP8808	1.7
TP8809	0.4
TP8810	1.4
TP8811	1.4
TP8812	2.7
TP8813	5.9
TP8814	1.7
TP8815	1.7
TP8816	0.6
TP8817	0.6
TP8818	0.6

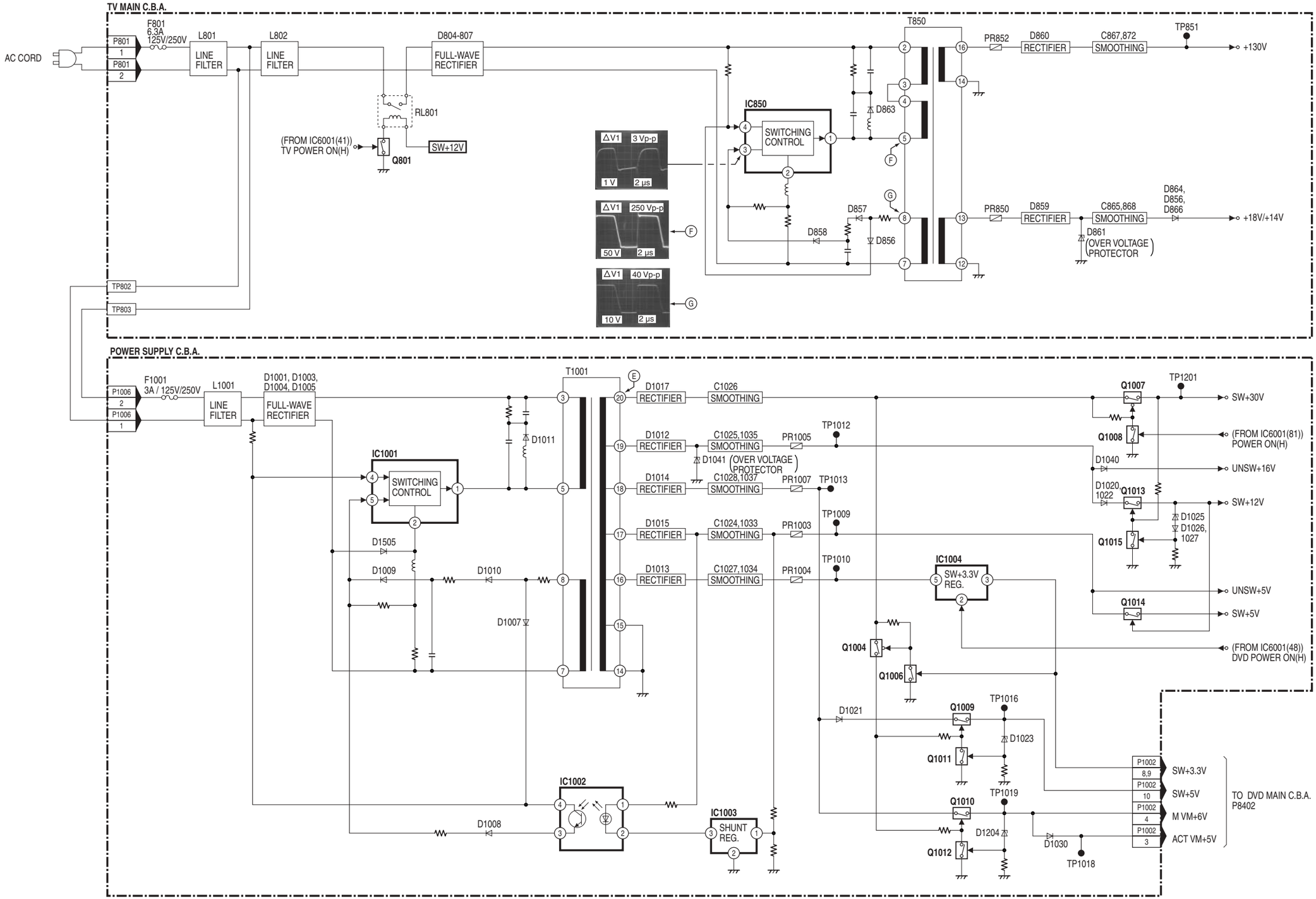
MODE / PIN NO.	STOP
TP8819	0.7
TP8820	0
TP8901	0.1
TP8902	5.1
TP8903	5.1
TP8904	5.1
TP8905	0
TP8906	0.4
TP8907	0.2
TP8908	0
TP8909	0
TP8910	0.1
TP8911	5.0
TP8912	2.3
TP8913	2.3
TP8914	2.3
TP8915	2.2
TP8916	2.5
TP8917	2.5
TP8918	0
TP8919	2.3
TP8920	2.3
TP8921	2.3
TP8922	2.3
TP8923	2.3
TP8924	0
TP8925	0.3

DVD SUB
C.B.A.

MODE / PIN NO.	STOP
TP8954	0.6
TP8955	0.7

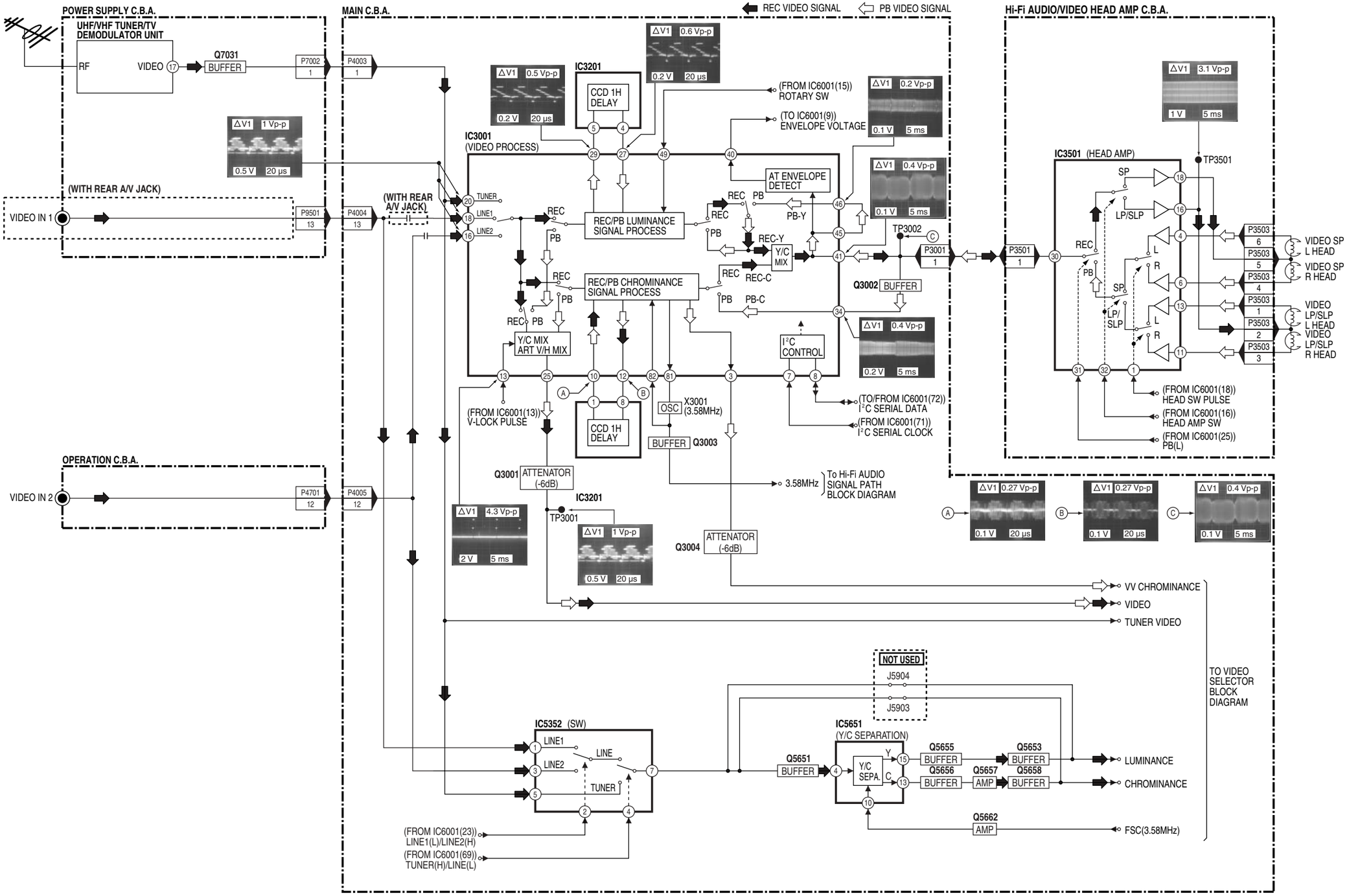
VOLTAGE CHART
PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

POWER SUPPLY BLOCK DIAGRAM



POWER SUPPLY BLOCK DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

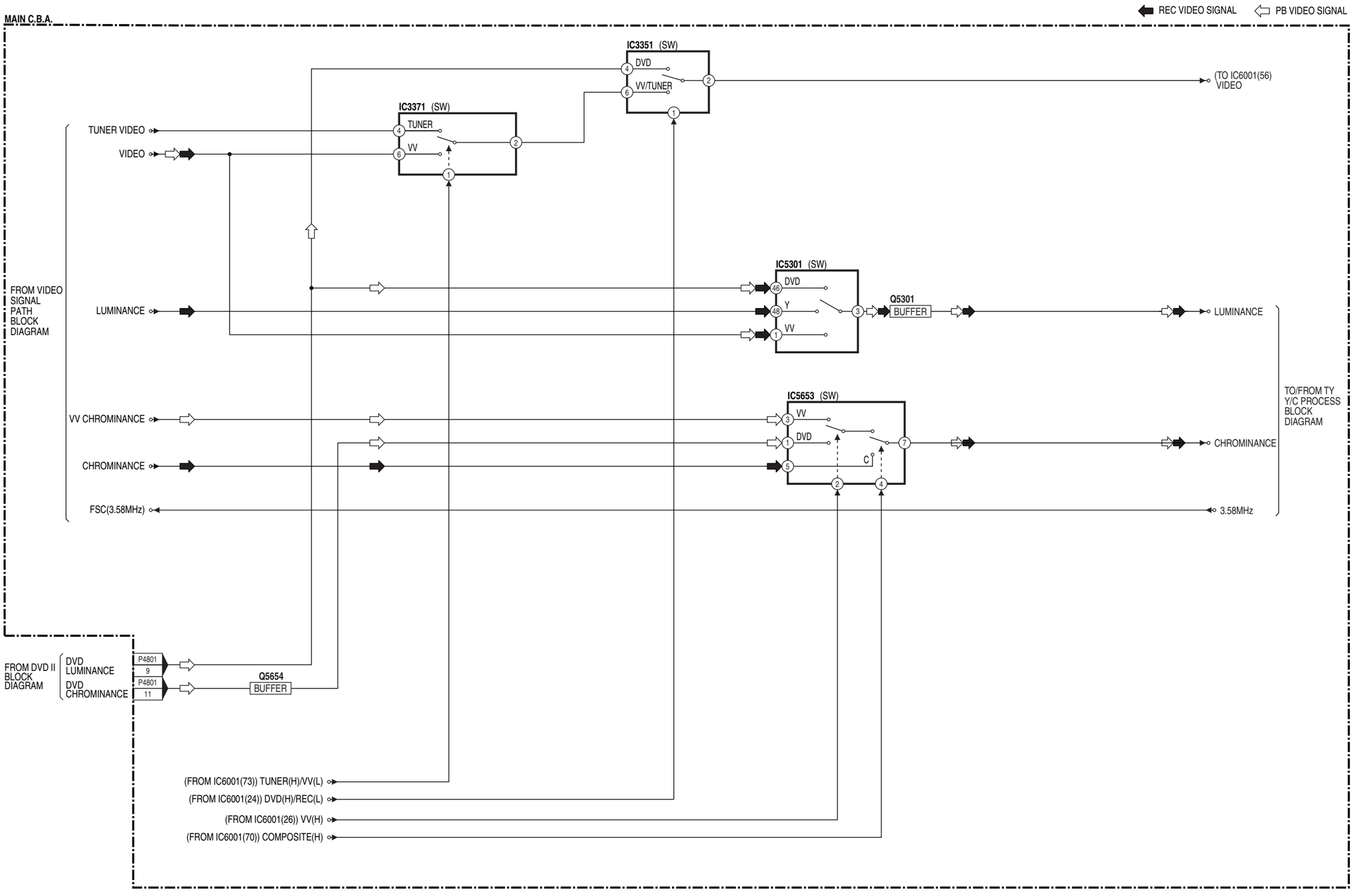
VIDEO SIGNAL PATH BLOCK DIAGRAM



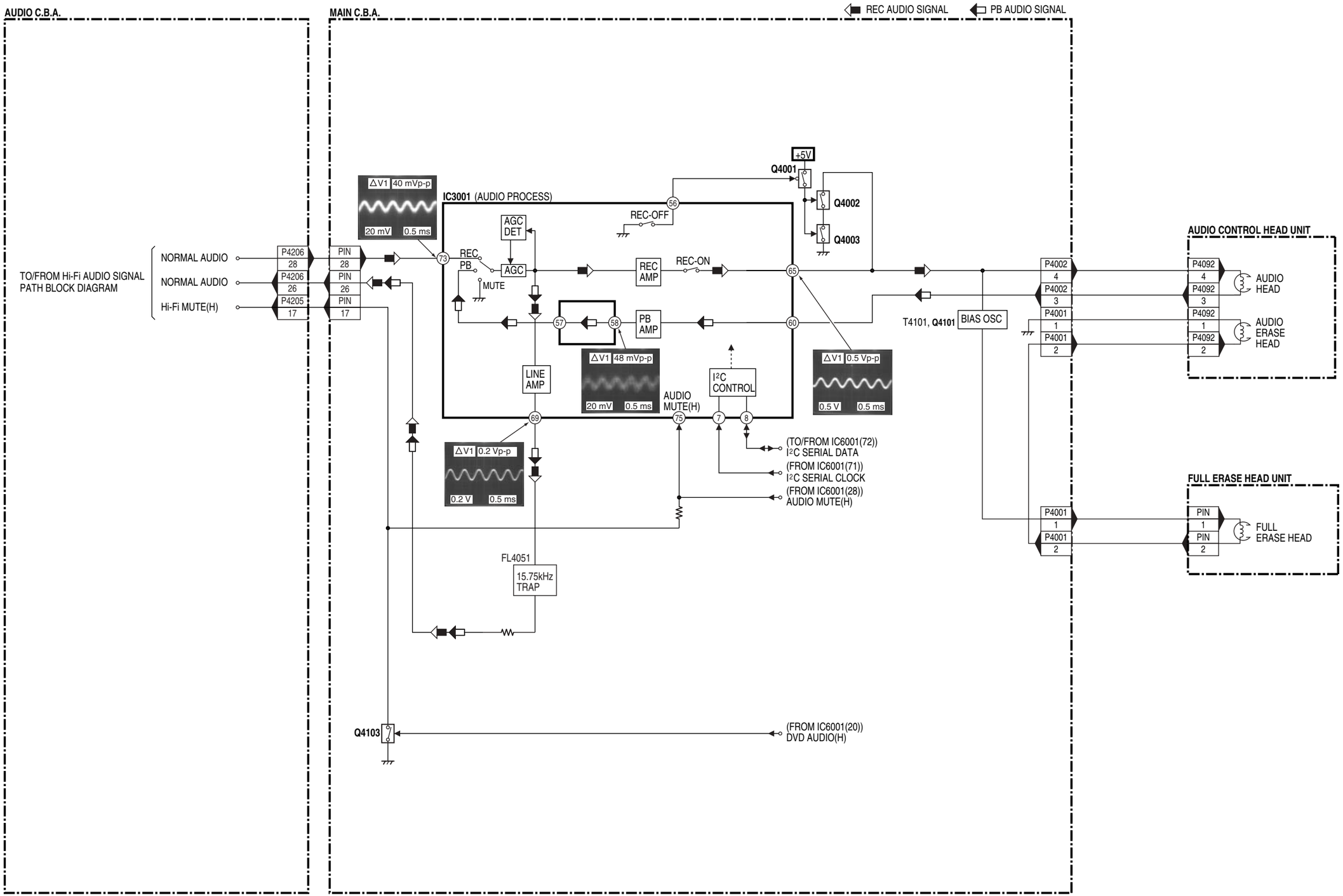
VIDEO SIGNAL PATH BLOCK DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

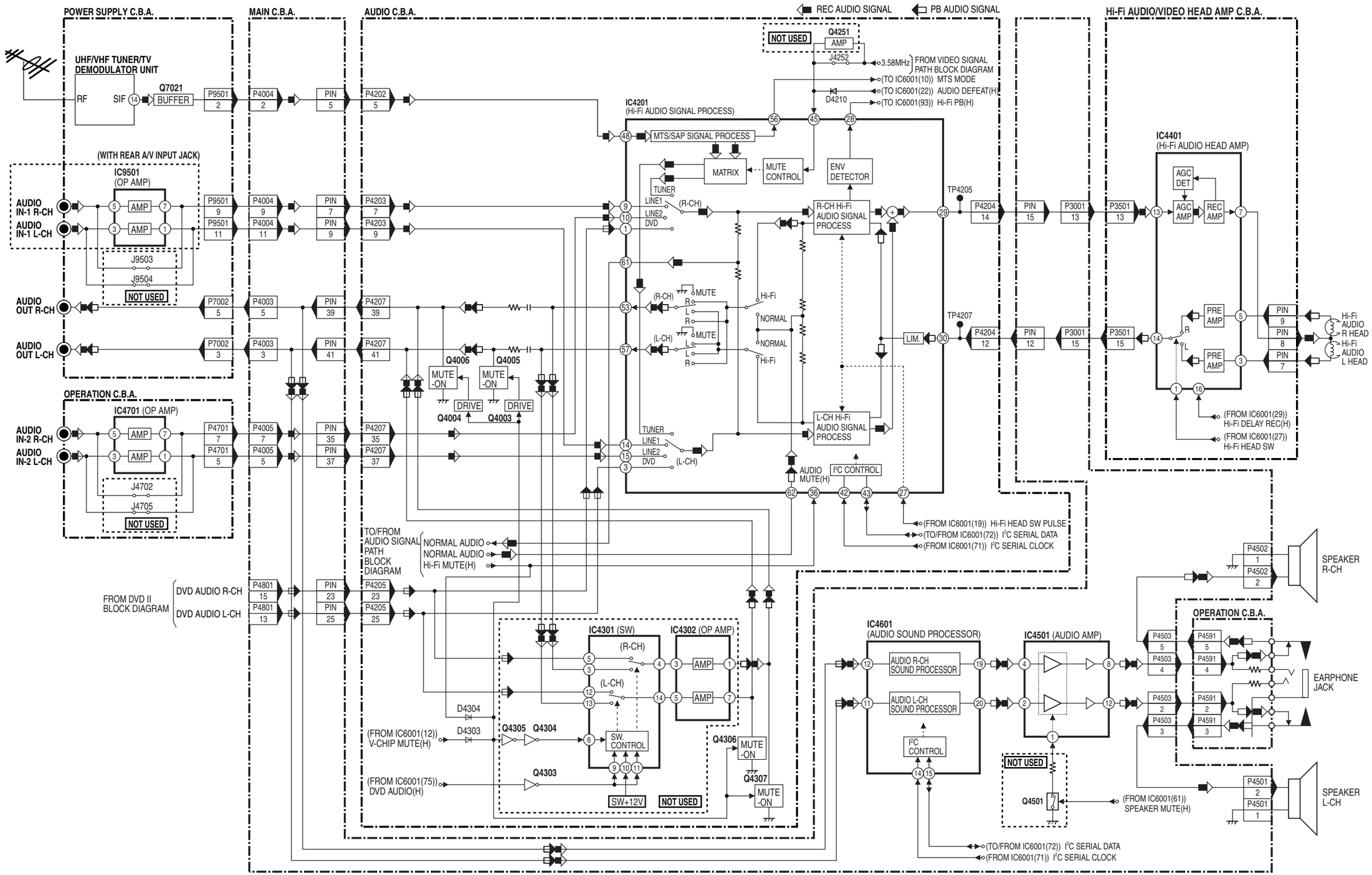
VIDEO SELECTOR BLOCK DIAGRAM



AUDIO SIGNAL PATH BLOCK DIAGRAM



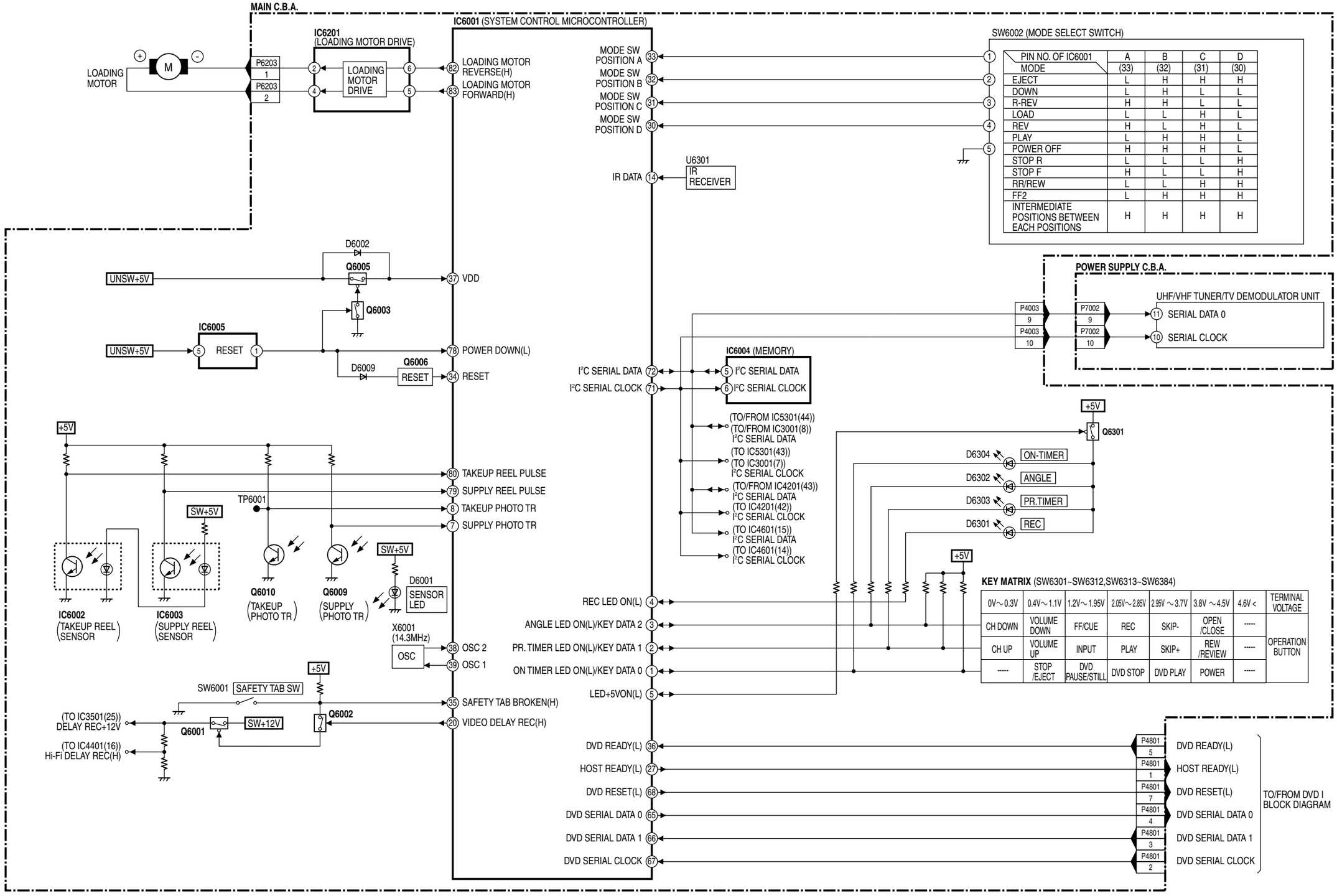
Hi-Fi AUDIO SIGNAL PATH BLOCK DIAGRAM



Hi-Fi AUDIO SIGNAL PATH BLOCK DIAGRAM

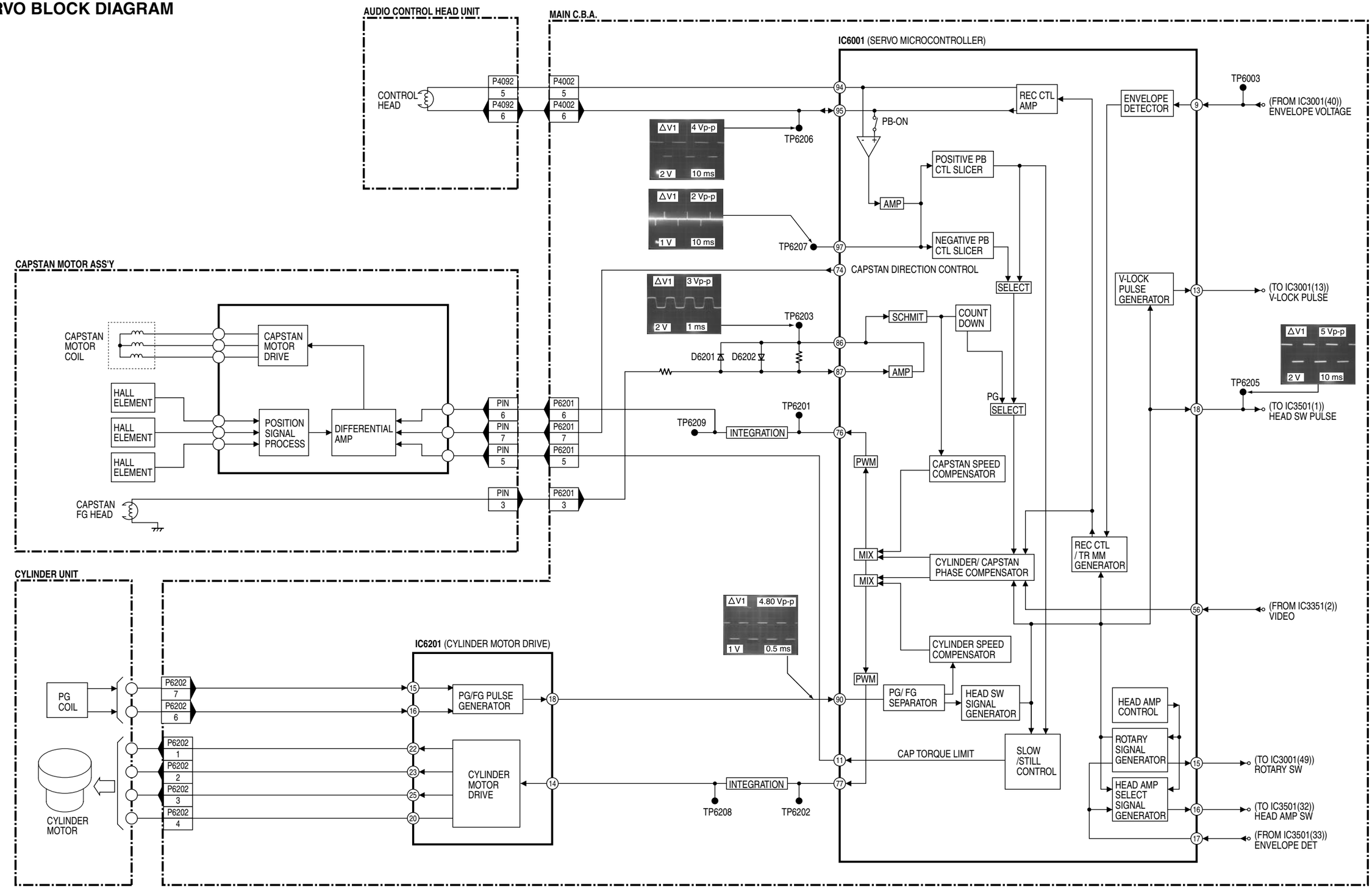
PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

SYSTEM CONTROL BLOCK DIAGRAM



SYSTEM CONTROL BLOCK DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

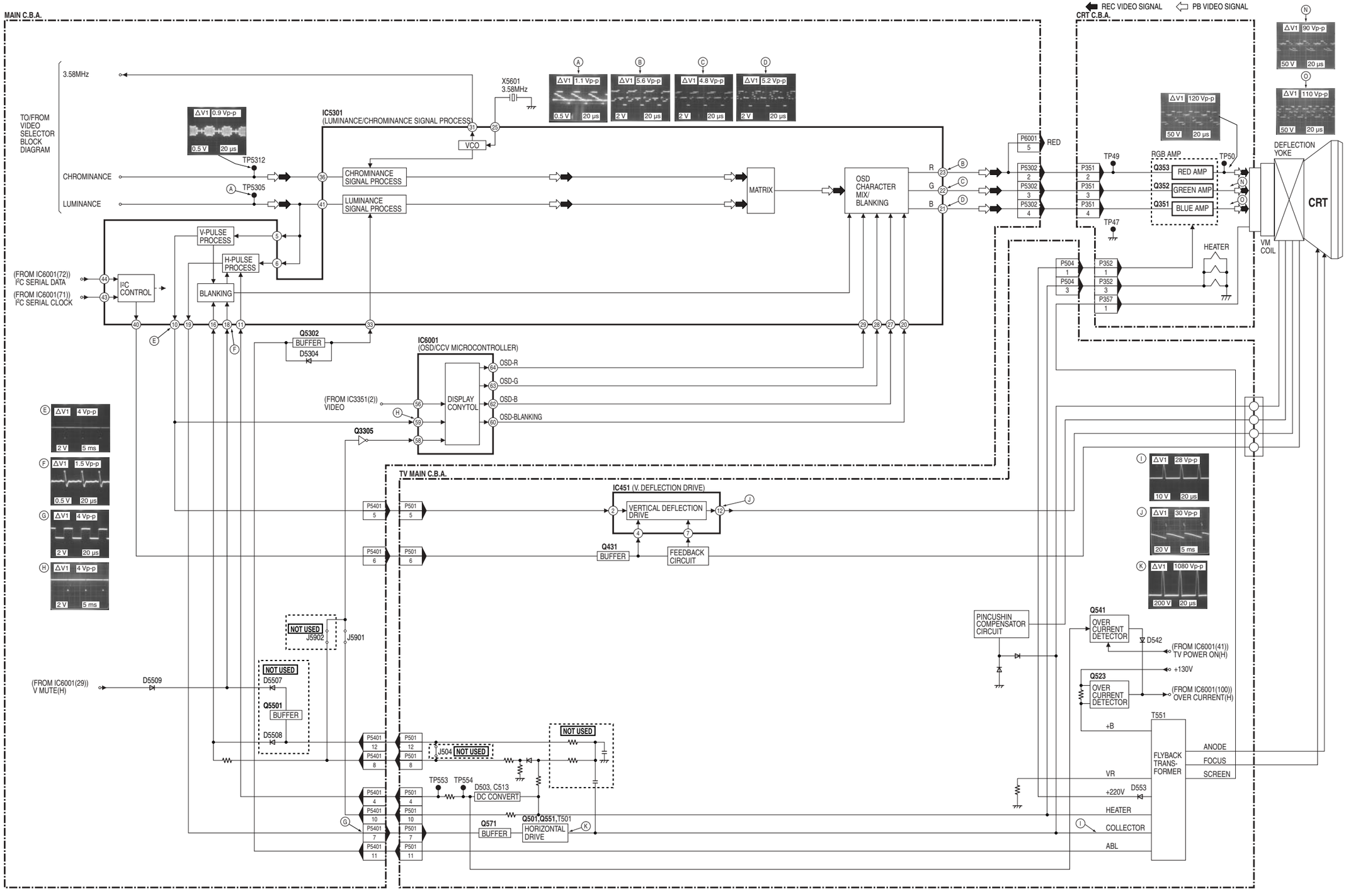
SERVO BLOCK DIAGRAM



SERVO BLOCK DIAGRAM

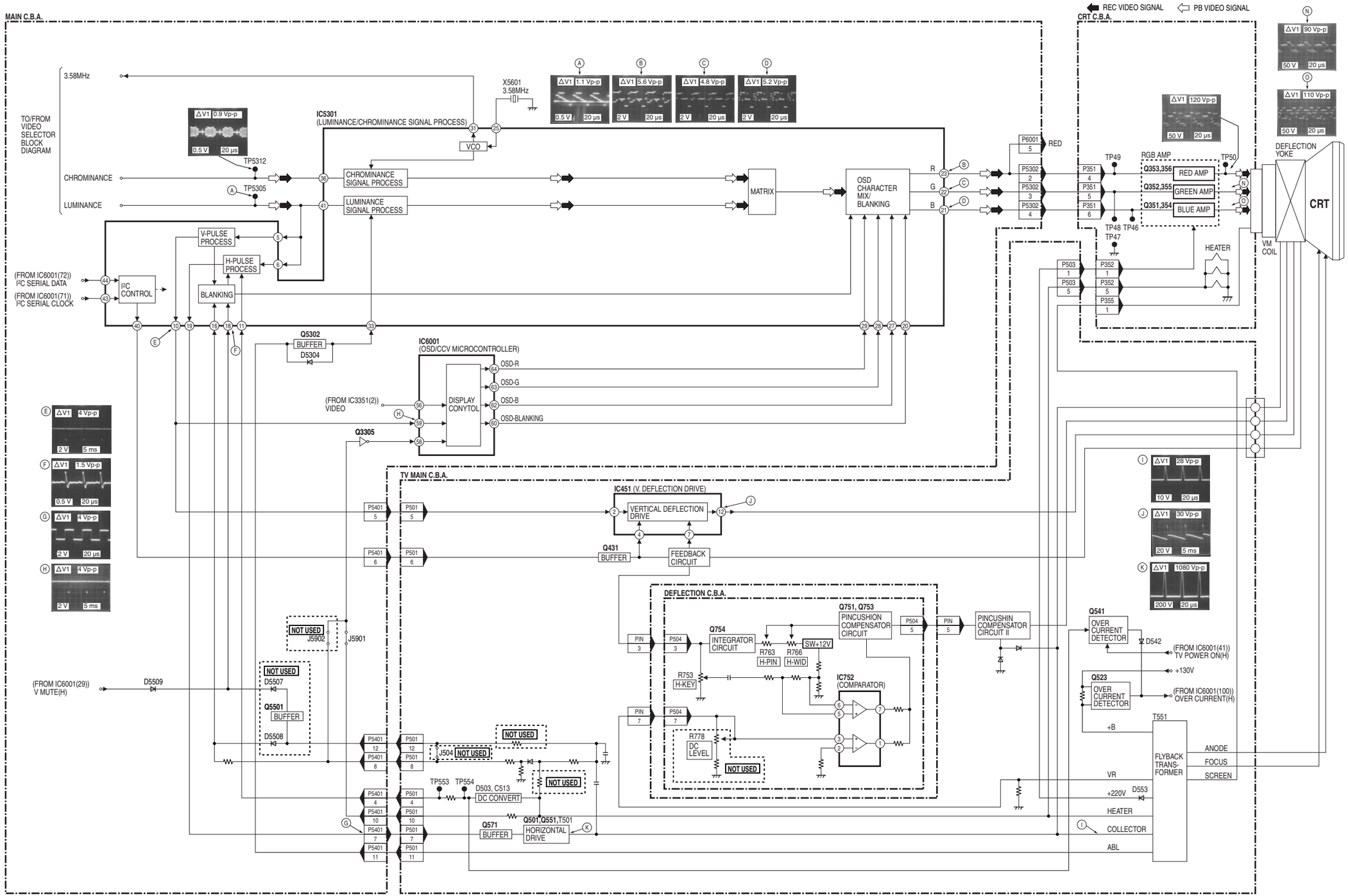
PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

TV Y/C PROCESS BLOCK DIAGRAM (Models : PV-DF204/PV-DF2004/PV-DF2004-K)



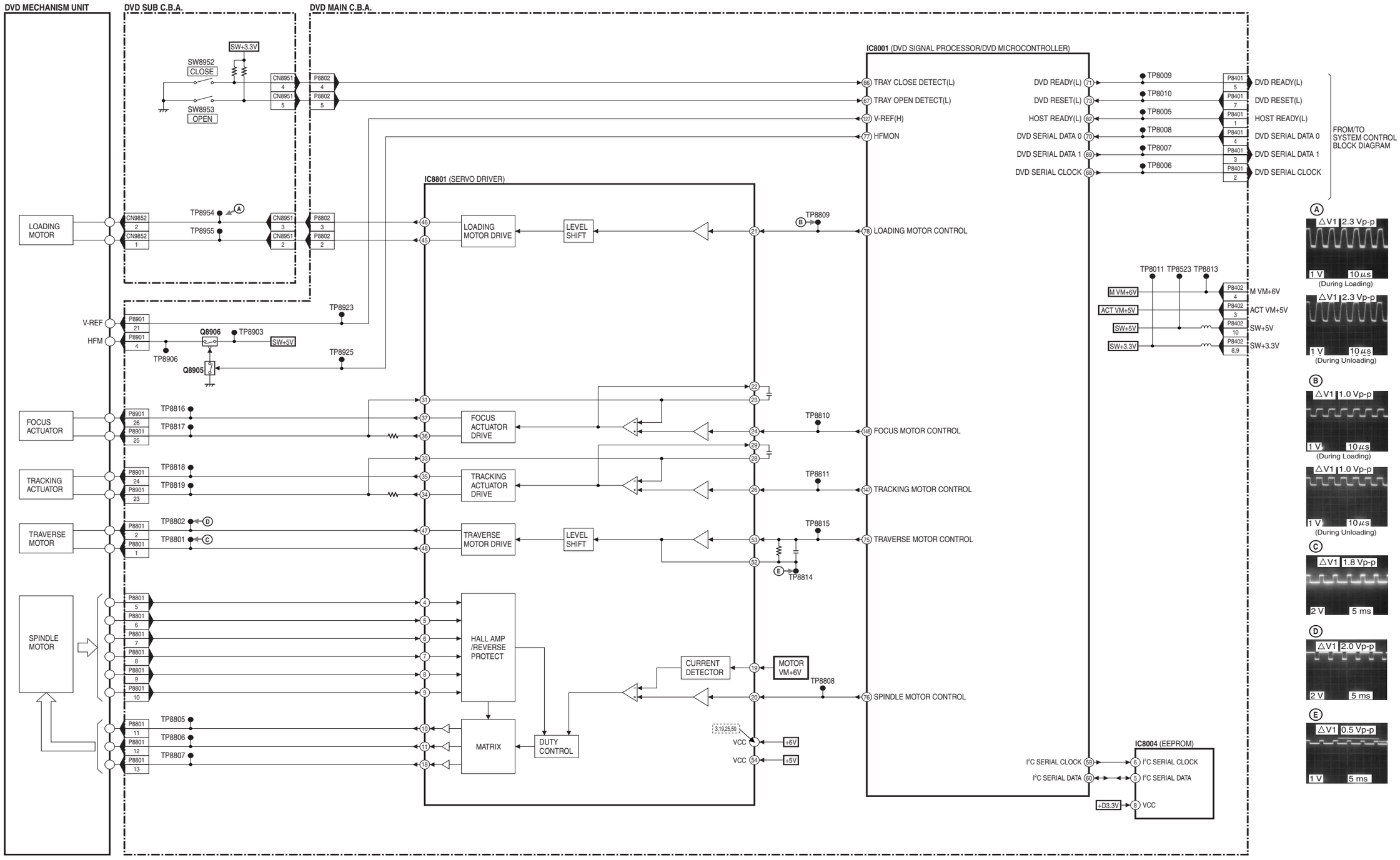
TV Y/C PROCESS BLOCK DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K

TV Y/C PROCESS BLOCK DIAGRAM (Models : PV-DF274/PV-DF2704/PV-DF2704-K)



TV Y/C PROCESS BLOCK DIAGRAM
PV-DF274/PV-DF2704/PV-DF2704-K

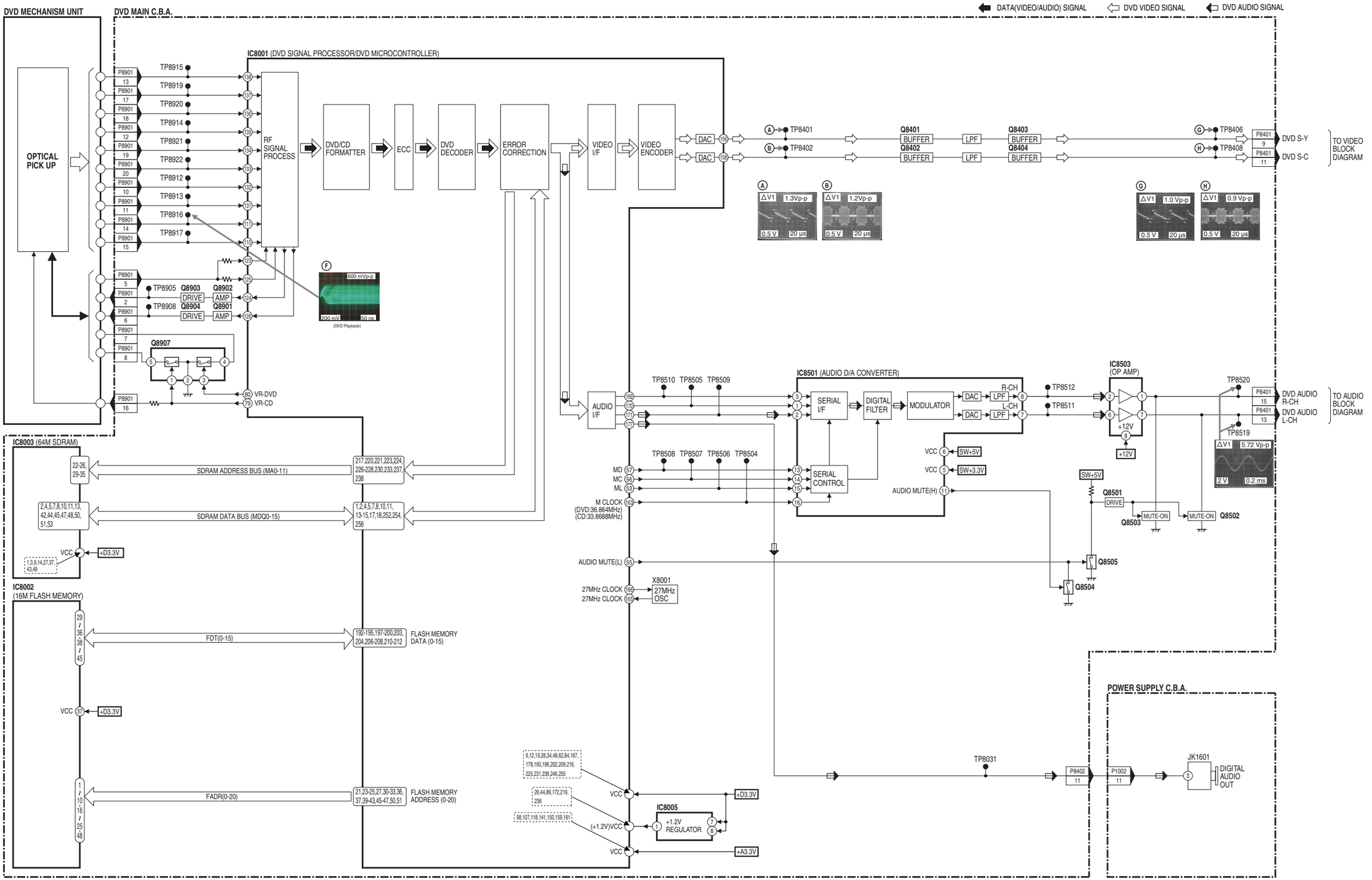
DVD I BLOCK DIAGRAM



DVD I BLOCK DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

DVD II BLOCK DIAGRAM



DVD II BLOCK DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K/PV-DF274/PV-DF2704/PV-DF2704-K

Troubleshooting Hints

How to confirm whether DVD circuit or other circuits is defective.

NOTE:
Host communication may not occur correctly between IC6001 on the Main C.B.A. and IC8001 on the DVD Main C.B.A. when there is a problem on the DVD Main C.B.A.
(Serial Data Communication failure between IC6001 and IC8001 within 30sec. IC6001 will switch automatically to VCR.)
(Check the VCR mode and DVD mode.)
Check the voltage during the 30 seconds during which the unit remains in DVD mode.

1) Confirm DVD operation and VCR operation

1. Playback a VHS tape.
2. Playback a DVD disc.

Both NG → Main C.B.A. is defective. Repair the Main C.B.A.

No PB VCR only → Main C.B.A. is defective. Repair the Main C.B.A.

No PB DVD only →

First, confirm that the Main C.B.A. is O.K. other than DVD Mechanism Unit and DVD Main C.B.A. by referring to "Communication Timing Chart 1," and "Communication Timing Chart 2."
Check points:
1. All Power Supply Voltages for DVD circuit (TP8011 (SW_3.3V_DVD), TP8523 (SW_5V_DVD), TP8813 (M_VM_6V), Pin3 of P8402 (ACT_VM_5V) on the DVD Main C.B.A.)
2. Output Signal from DVD Main C.B.A.(TP8009 (D_RDY)), Output Signal from Main C.B.A.(TP8005 (H_RDY)) (TP8009 (D_RDY), TP8005 (H_RDY) on the DVD Main C.B.A.)

NG → Main C.B.A. is defective. Repair the Main C.B.A.

OK →

DVD circuit is defective.
Perform troubleshooting referring to "How to confirm whether DVD Mechanism Unit or DVD Main C.B.A. is defective."

How to confirm whether DVD Mechanism Unit or DVD Main C.B.A. is defective.

Confirm communication between DVD Main C.B.A. and Main C.B.A. by referring to "Communication Timing Chart 2."
Check points:
1. Output Signal from DVD Main C.B.A. (TP8006 (DVD_SCK) on the DVD Main C.B.A.)

NG → DVD Main C.B.A. is defective. Repair the DVD Main C.B.A.
IC8001 or the circuit around it is defective.

OK →

Confirm that the OPEN/CLOSE TRAY works correctly.

NG → DVD Mechanism Unit or IC8801 is defective. Repair it by referring to the "Tray Operation Problem. "

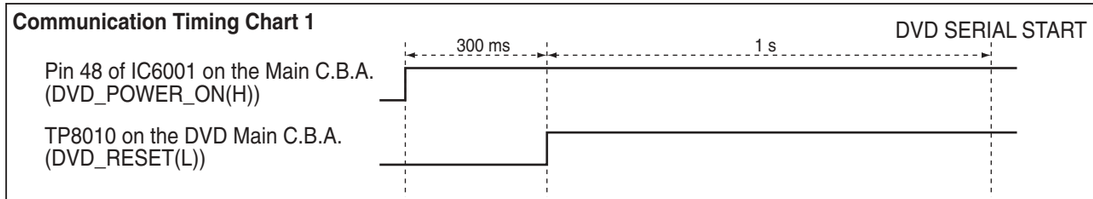
OK →

Playback the test DVD disc.

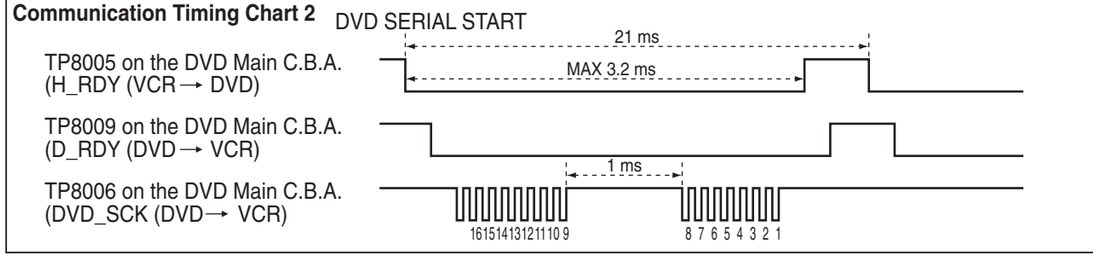
The Message "PLEASE CHECK THE DISC, AND FOR STAINS OR SCRATCHES ON DISC" appears. →
DVD Mechanism Unit or IC8801 or IC8001 is defective. Repair it referring to "Spindle Motor Operation Problem," and " Traverse Operation Problem," "Cause: Pickup Problem."

If there is problem with audio or picture, even though it plays back. →
DVD Main C.B.A. is defective. Repair DVD Main C.B.A.

Communication Timing Chart 1



Communication Timing Chart 2


DVD SERIAL START
21 ms
MAX 3.2 ms
TP8005 on the DVD Main C.B.A. (H_RDY (VCR → DVD)
TP8009 on the DVD Main C.B.A. (D_RDY (DVD → VCR)
1 ms
TP8006 on the DVD Main C.B.A. (DVD_SCK (DVD → VCR)
16 15 14 13 12 11 10 9
8 7 6 5 4 3 2 1

Troubleshooting Hints of DVD Mechanism Unit

Tray Operation Problem

Check the signal at TP8954 on the DVD Sub C.B.A. (3.0 Vp-p)

OK → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.

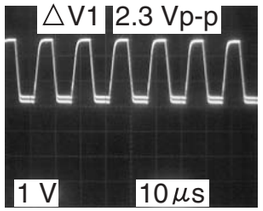
NG →

Check the signal at TP8809 (TRYIN) on the DVD Main C.B.A.

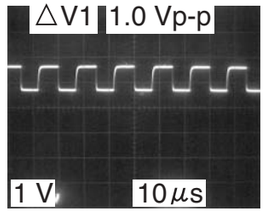
OK → IC8801 on the DVD Main C.B.A. is defective. Replace IC8801 on the DVD Main C.B.A.

NG →

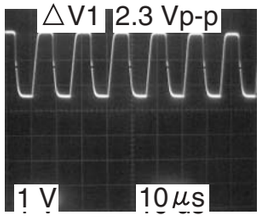
IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.



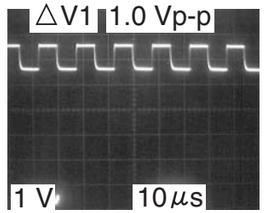
TP8954
(During Loading)



TP8809
(During Loading)



TP8954
(During Unloading)



TP8809
(During Unloading)

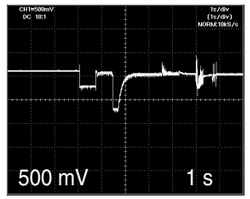
Spindle Motor Operation Problem

Note: Check the signal at TP8808 as soon as disc has been inserted. Otherwise, following waveform can not be monitored.

Check the signal at TP8808 (SPIN) on the DVD Main C.B.A.
- NG → IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.
- OK → Replace IC8801 on the DVD Main C.B.A.
  - Still NG → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.

Signal at TP8808

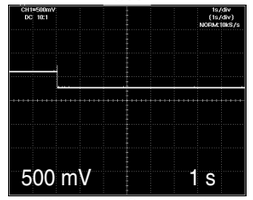
OK



(Disc Spinning)

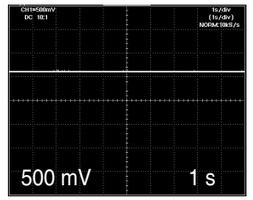
OR

OK



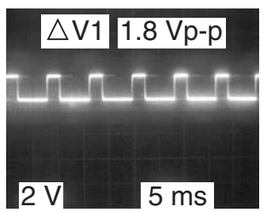
(No Disc Spinning)

NG

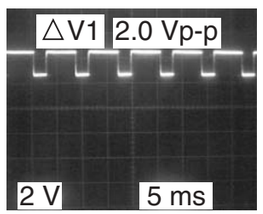


Traverse Operation Problem

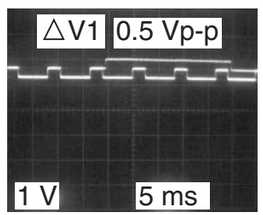
Check the signal at TP8801 and TP8802 on the DVD Main C.B.A.
- OK → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.
- NG → Check the signal at TP8814 on the DVD Main C.B.A.
  - OK → IC8801 on the DVD Main C.B.A. is defective. Replace IC8801 on the DVD Main C.B.A.
  - NG → IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.



TP8801



TP8802



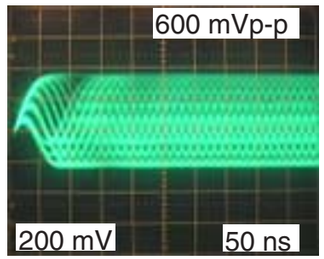
TP8814

Pickup Operation Problem

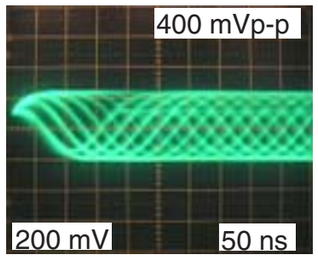
Note: Check the voltage during 10 to 20 seconds as soon as disc has been inserted.

Check the voltage at TP8903 on the DVD Main C.B.A. Is it +5.0 V ?
- NG → Repair the around circuit of "5V-FEP" line.
- OK → Check the voltage at TP8923 on the DVD Main C.B.A. Is it +2.2 V ?
  - NG → Replace the IC8001 on the DVD Main C.B.A.
  - OK → Check the voltage at TP8906 on the DVD Main C.B.A. Is it +5.0 V ?
    - NG → Check the voltage at TP8925 on the DVD Main C.B.A. Is it +2.0 V ?
      - NG → Replace the IC8001 on the DVD Main C.B.A.
      - OK → Replace the Q8905 and Q8906 on the DVD Main C.B.A.
    - OK → Confirm Wave form at TP8916 from normal DVD Movie or CD.
      - NG → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.
      - If the Message "PLEASE CHECK THE DISC, AND FOR STAINS OR SCRATCHES ON DISC" appears. → IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.

RF Signal at TP8916



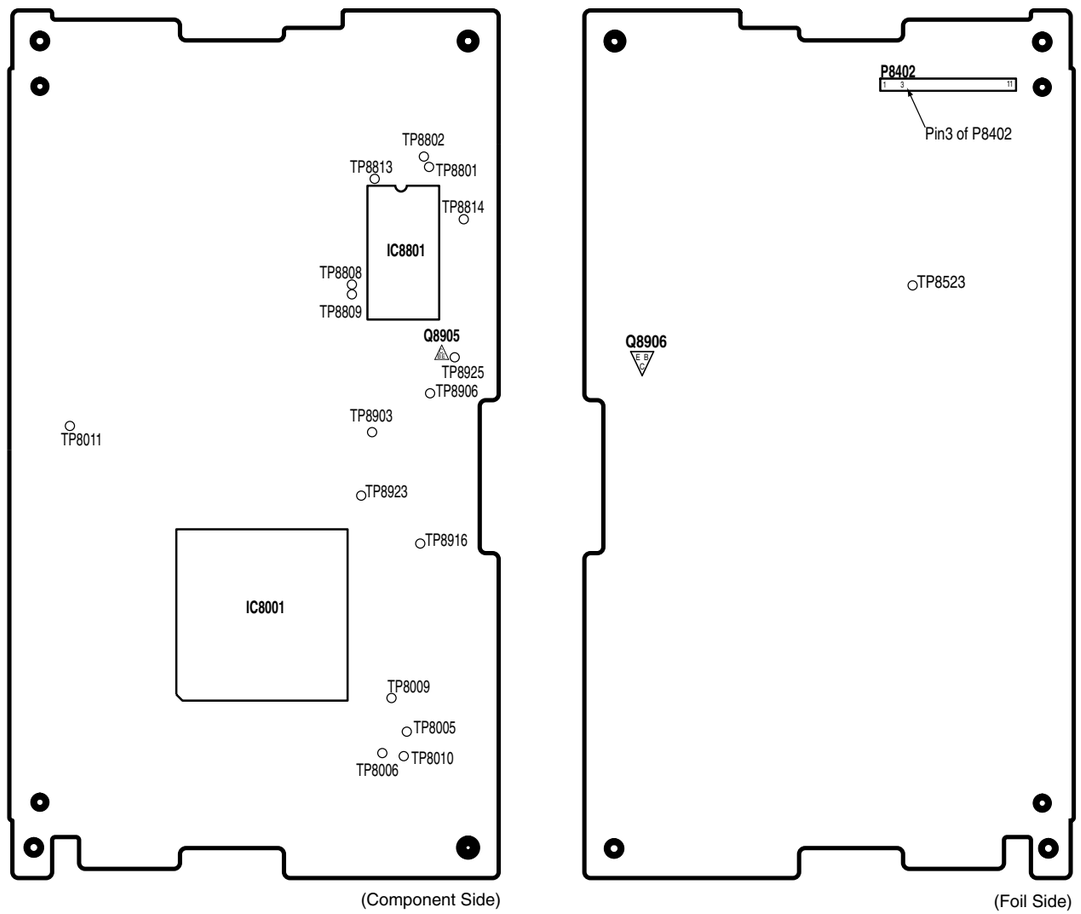
(DVD Playback)



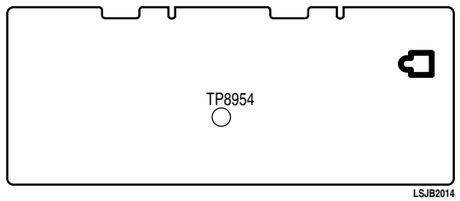
(CD Playback)

TEST POINTS LOCATION

DVD Main C.B.A.



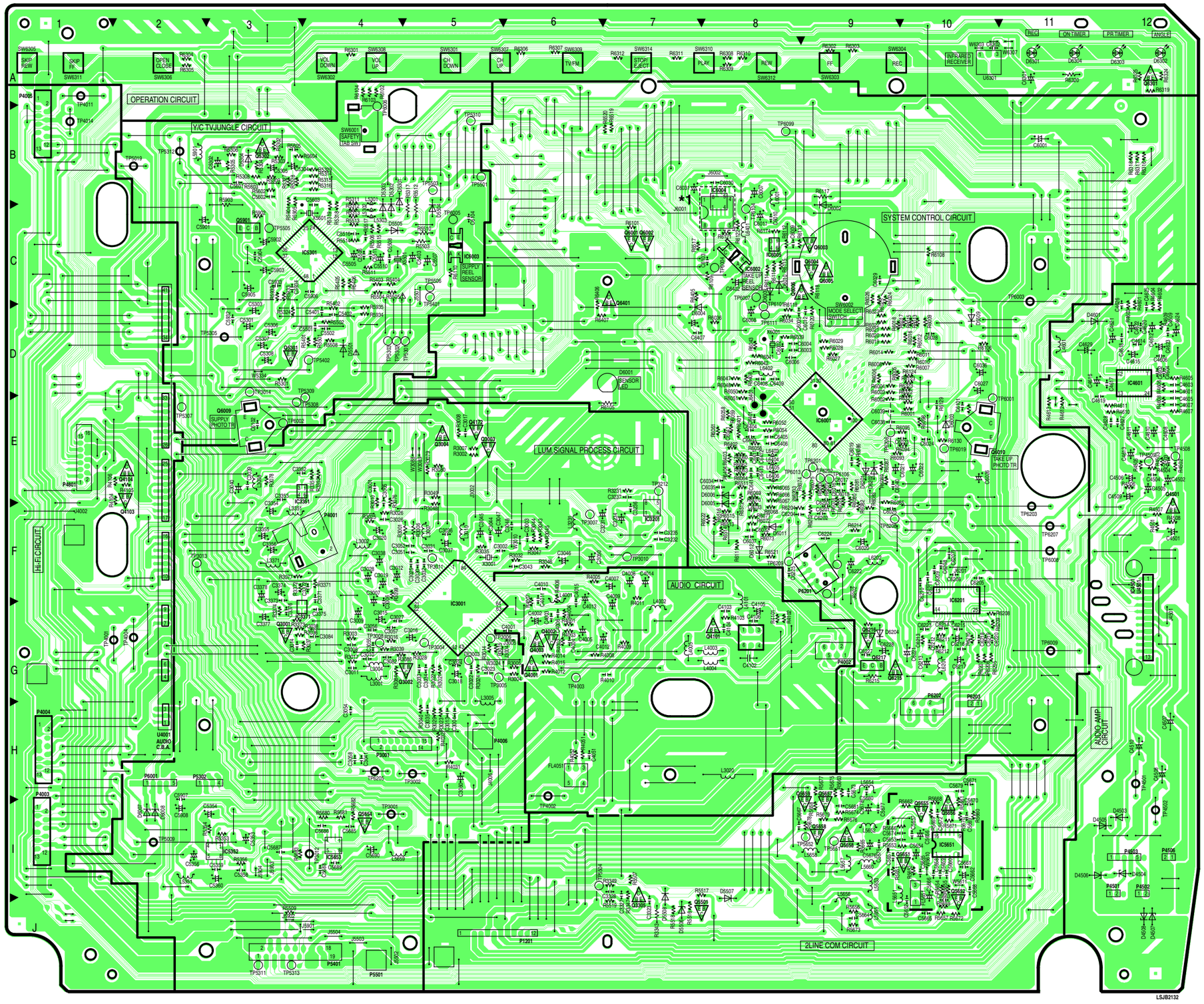
DVD Sub C.B.A.



Test Point Information

- ● Test Point with a Test Pin.
- ⦶ Test Point with a jumper wire across a hole in the P.C.B.
- ○ Test Point with no Test Pin.

MAIN C.B.A. LSEP2132B(A,B,C) / LSEP2132A (D,E,F) / LSEP2132D (G,H) / LSEP2132C (I)



NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS. FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING, PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

*1 Note

There are 2 types of EEPROM IC (IC6004) used on the Main C.B.A. (DIP TYPE and SOP TYPE) However, these are same reliability.

Fig. 1

OR

Fig. 2

Be sure to install DIP type IC from the component side as shown in Fig. 1.
Be sure to intall SOP type IC from the foil side as shown in Fig. 2.

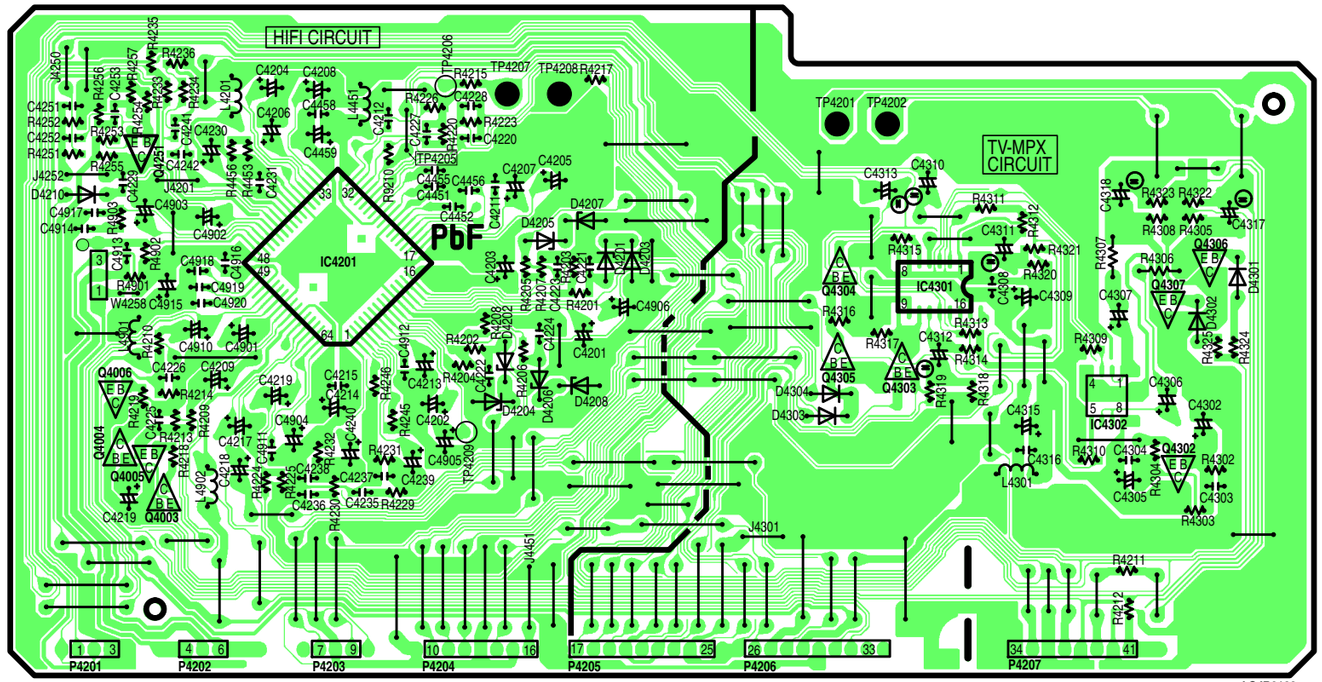
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I

MAIN C.B.A. LSEP2132B/LSEP2132A/LSEP2132D/LSEP2132C
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

AUDIO C.B.A. LSEP2133A (A,B,C,D,E) / LSEP2133B (G,H,I)



LSJB2133

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

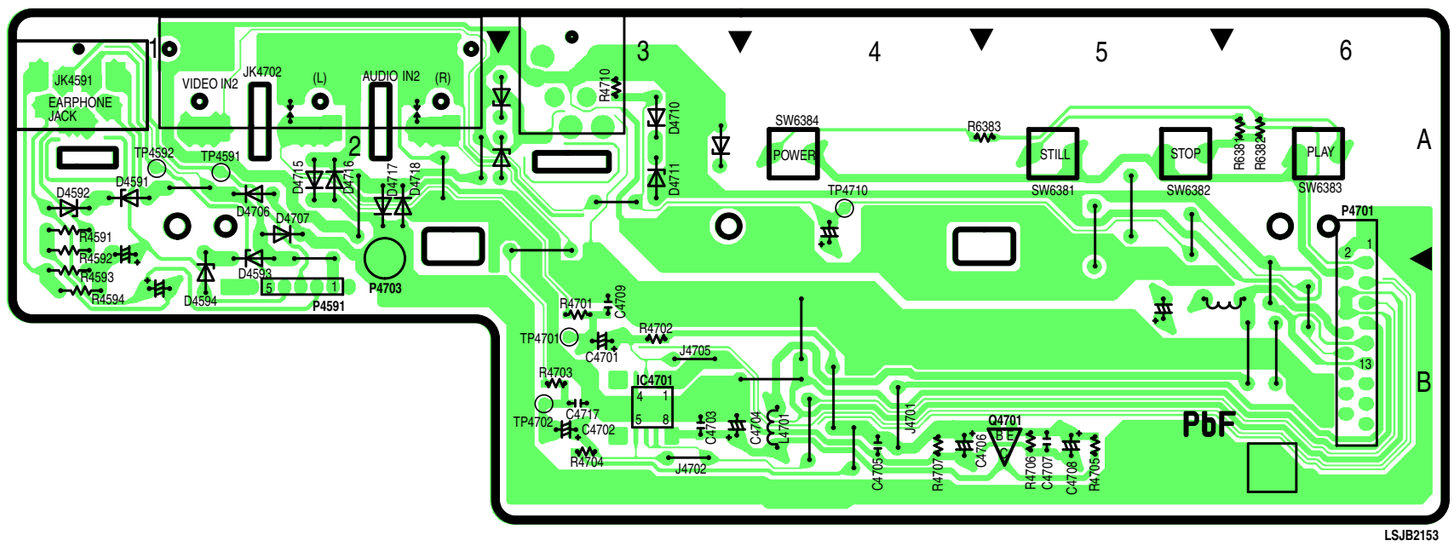
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

OPERATION C.B.A. LSEP2153A



LSJB2153

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

AUDIO C.B.A. LSEP2133A/LSEP2133B
OPERATION C.B.A. LSEP2153A
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

TV MAIN C.B.A. LSEP2151B (A,B,C) / LSEP2151A (D,E,F) / LSEP2151D (G,H) / LSEP2151C (I)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

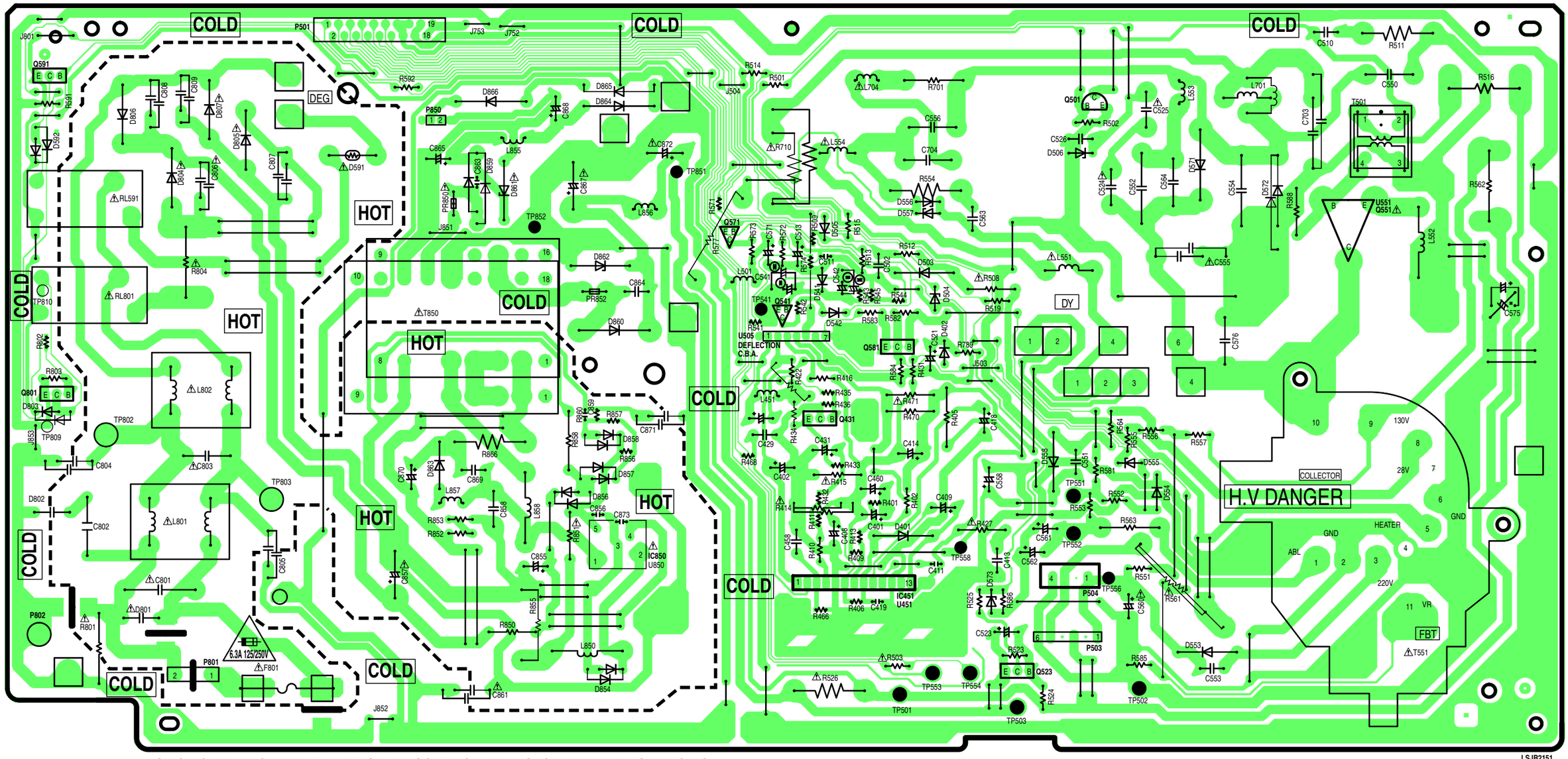
NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 6.3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME
TYPE 6.3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I



LSJB2151

HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.

TV MAIN C.B.A. LSEP2151B/LSEP2151A/LSEP2151D/LSEP2151C
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

POWER SUPPLY C.B.A. LSEP2155A (A,B,C,D,E,F) / LSEP2155B (G,H,I)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS. FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING, PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

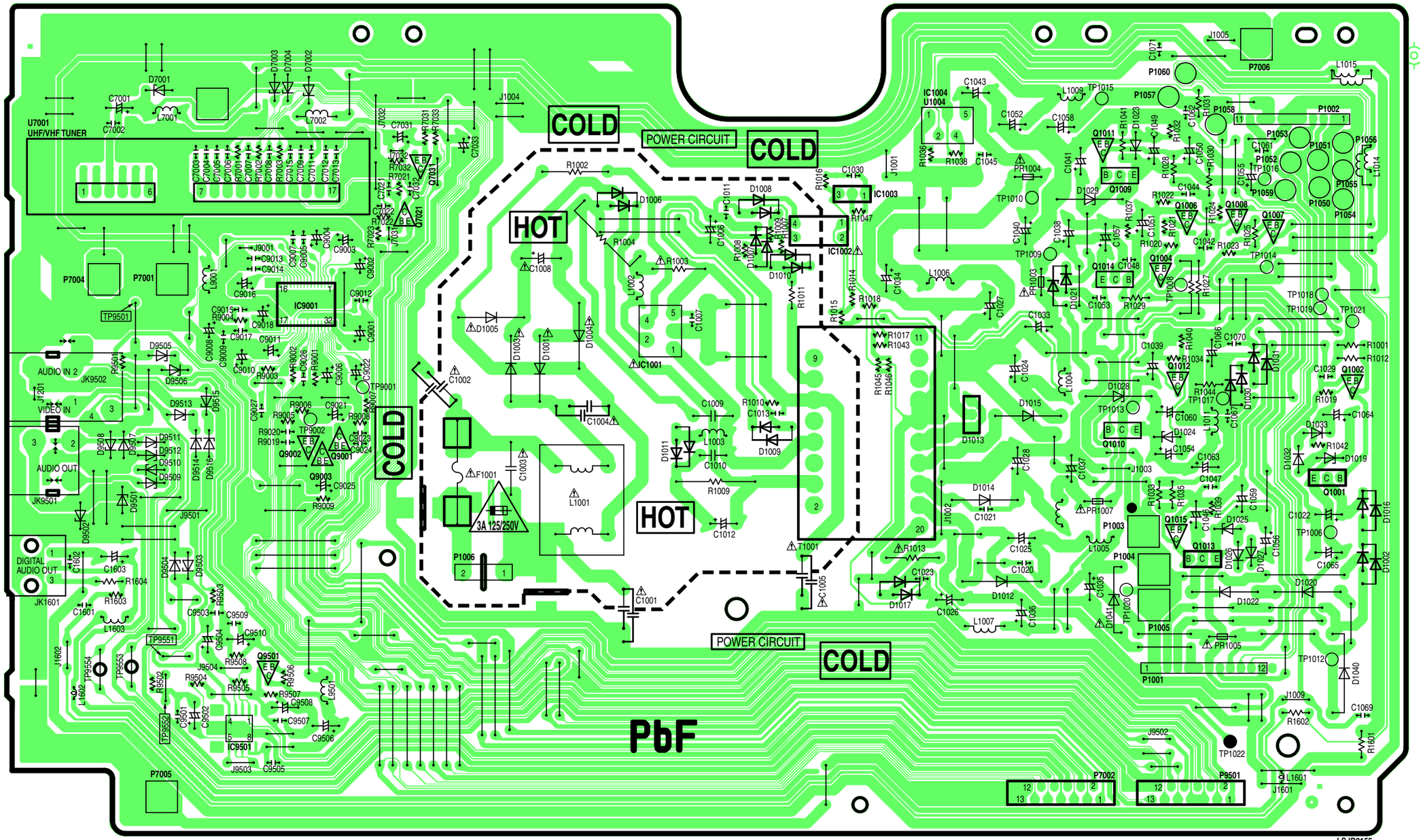
NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME TYPE 3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I



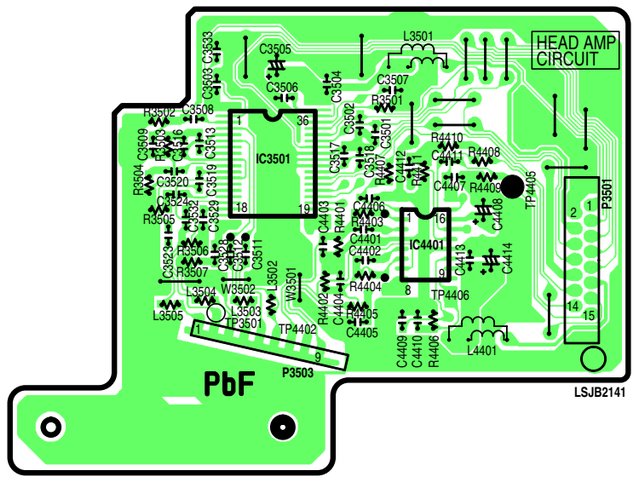
HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.

POWER SUPPLY C.B.A. LSEP2155A/LSEP2155B
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

HI-FI AUDIO/VIDEO HEAD AMP C.B.A. LSEP2141A

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

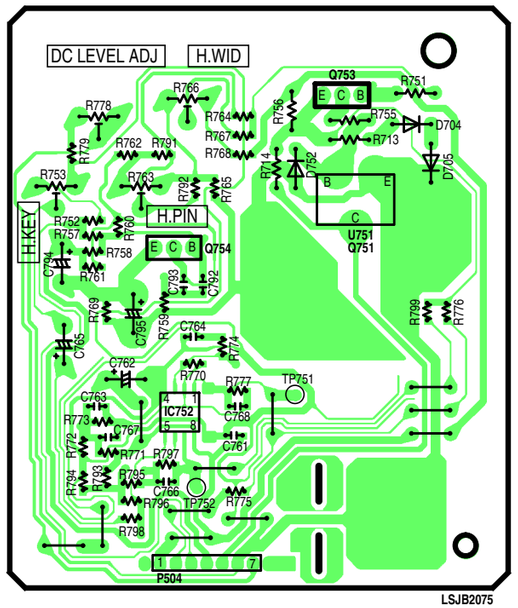


LSJB2141

DEFLECTION C.B.A. LSEP2075A (D,E,F)

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

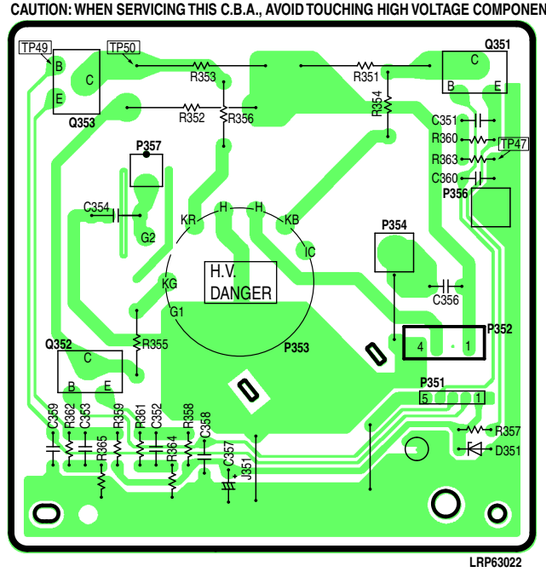
NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.



LSJB2075

CRT C.B.A. LRP63022R (A,B,C) / LRP63022Q (G,H) / LRP63022P (I)

CAUTION: WHEN SERVICING THIS C.B.A., AVOID TOUCHING HIGH VOLTAGE COMPONENTS.



LRP63022

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

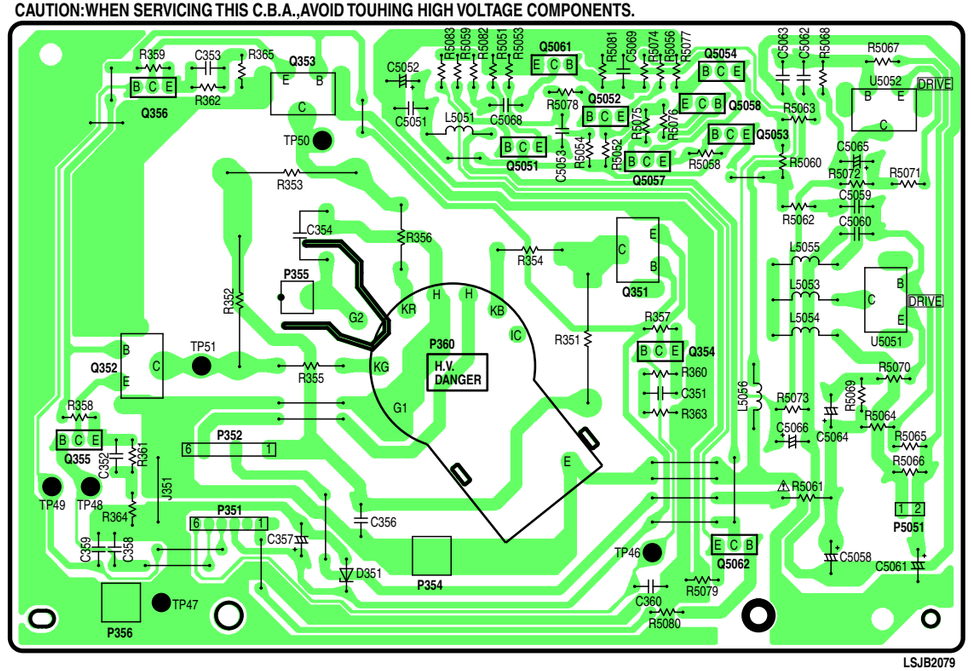
NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I

CRT C.B.A. LSEP2079A (D,E,F)

CAUTION:WHEN SERVICING THIS C.B.A.,AVOID TOUHING HIGH VOLTAGE COMPONENTS.



LSJB2079

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

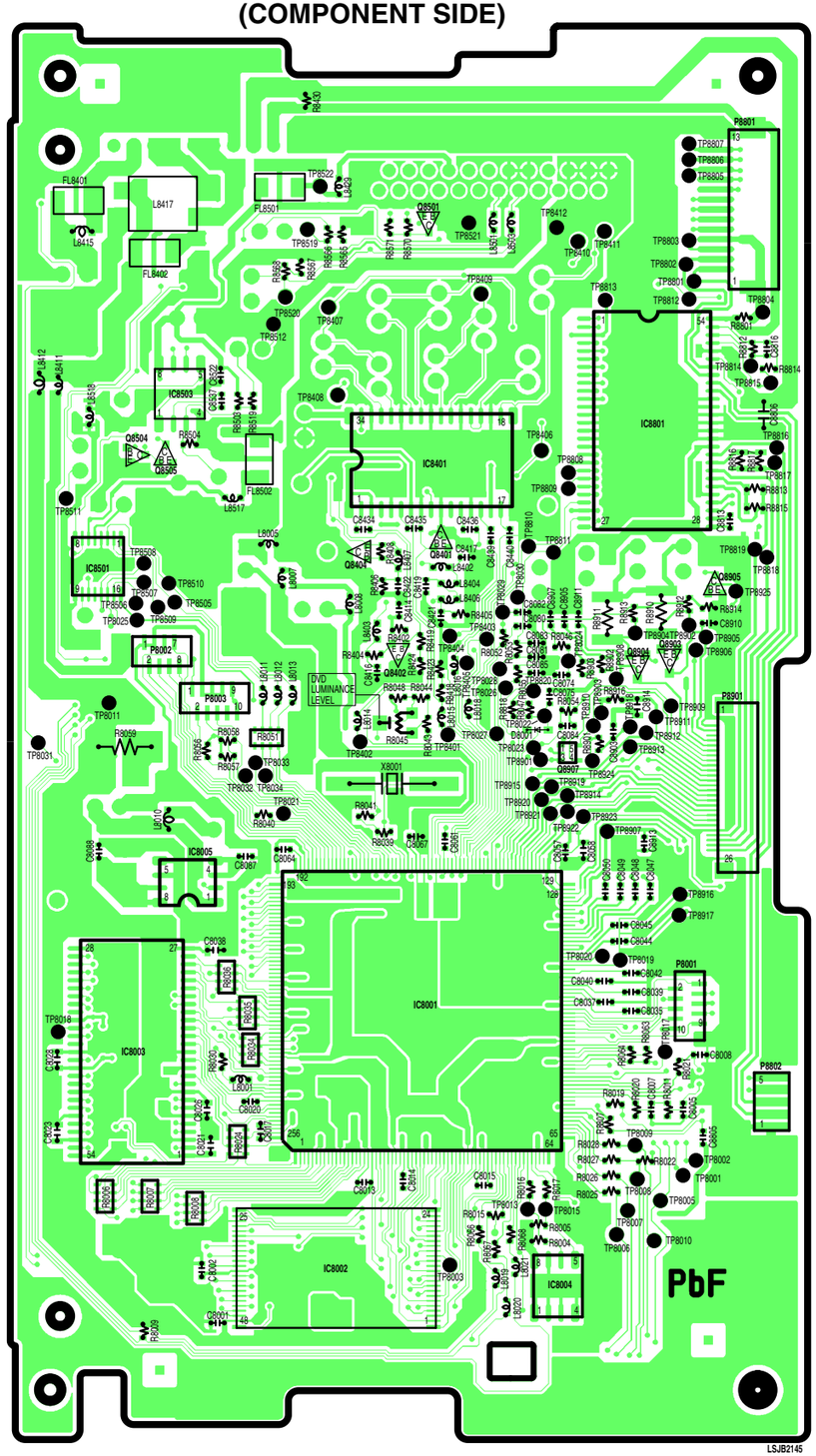
NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

HI-FI AUDIO/VIDEO HEAD AMP C.B.A. LSEP2141A
DEFLECTION C.B.A. LSEP2075A
CRT C.B.A. LRP63022R/LRP63022Q/LRP63022P
CRT C.B.A. LSEP2079A
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

DVD MAIN C.B.A. LSEP2145A

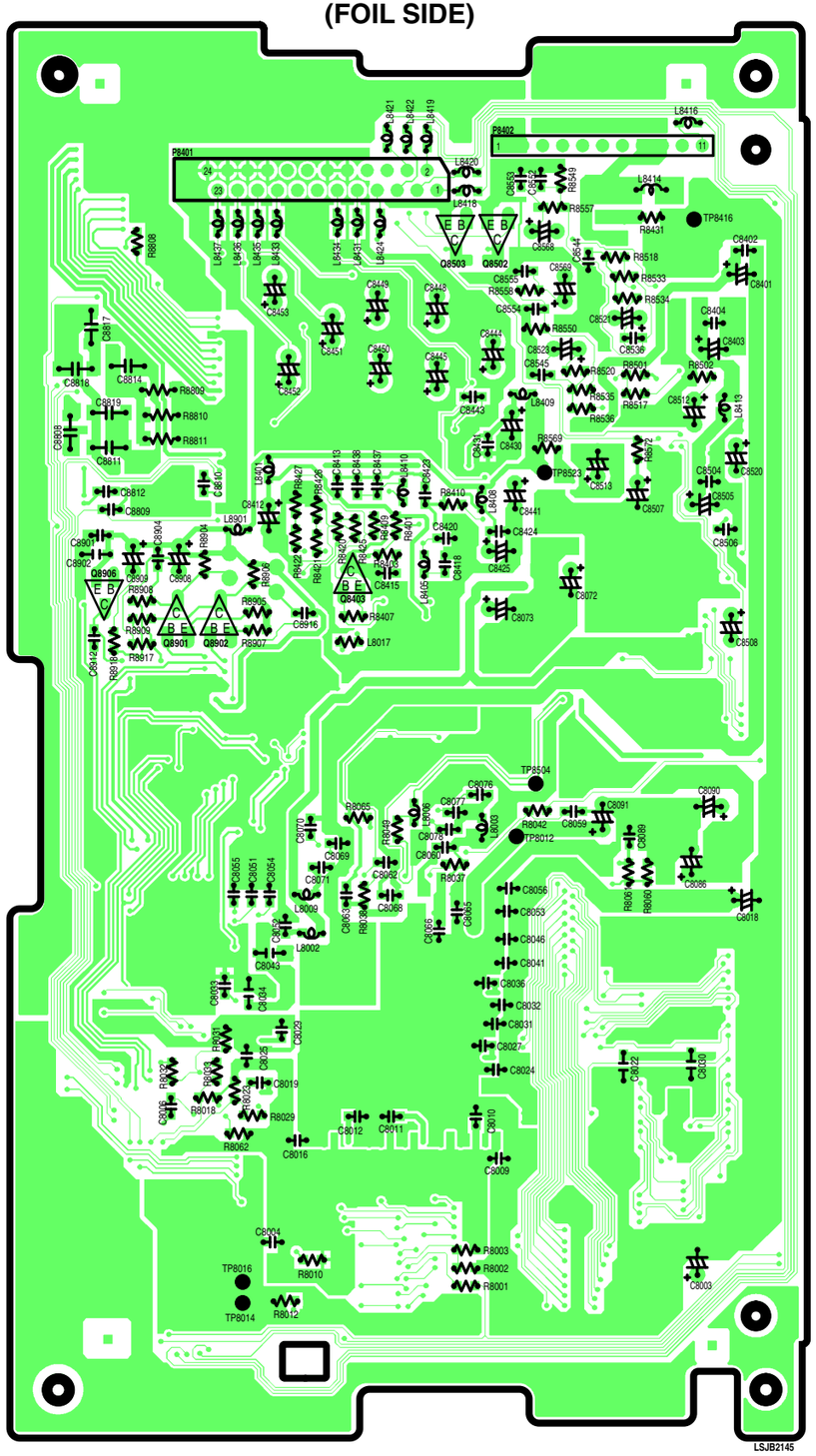
(COMPONENT SIDE)



LSJB2145

(DUAL PATTERNS)

(FOIL SIDE)



LSJB2145

(DUAL PATTERNS)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

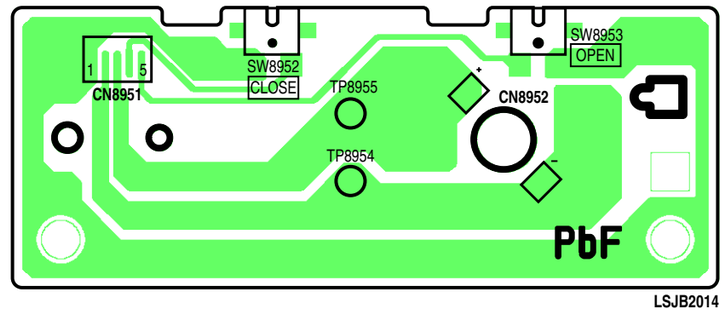
NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS. FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING, PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

DVD SUB C.B.A. LSEP2014A

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS. FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING, PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.



LSJB2014

DVD MAIN C.B.A. LSEP2145A
DVD SUB C.B.A. LSEP2014A
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

1. **Important safety notice**
   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components. Use only the specified parts.

2. Do not use the part number shown on this drawing for ordering.
   The correct part number and part value is shown in the parts list, and may be slightly different or amended since this drawing was prepared.

3. Use only original replacement parts:
   To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Parts different in shape or size may be used.
   However, only interchangeable parts will be supplied as service replacement parts.

5. Test point information
   ⓘ :Test point with a jumper wire across a hole in P.C.B.
   ▭→ :Test point with a component lead on the foil side.
   ⊘ :Test point with no test pin.
   ● :Test point with a test pin.

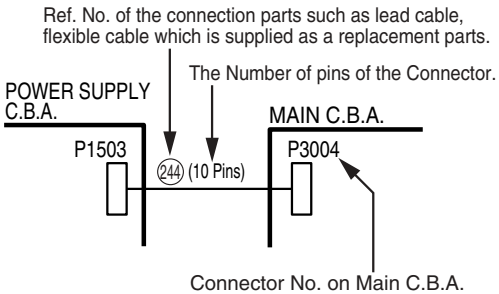
Schematic Diagram Notes

1. Indication for Zener Voltage of Zener Diodes
   The Zener Voltage of Zener Diodes are indicated as such on Schematic Diagrams.

   Example:
   (6.2V).....Zener Voltage

2. How to identify Connectors
   Each connector is labeled with a Connector No. and Pin No. Indicating what it is connected to,
   in other words, its counter part.
   Use the interconnection schematic diagram to find the connection between associated connectors.

   Example:
   The connections between C.B.A.s are shown below.


Ref. No. of the connection parts such as lead cable, flexible cable which is supplied as a replacement parts.
The Number of pins of the Connector.
POWER SUPPLY C.B.A.
MAIN C.B.A.
P1503
244 (10 Pins)
P3004
Connector No. on Main C.B.A.

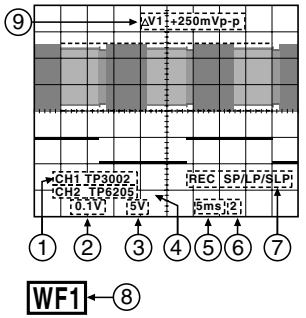
3. Parts marked "PT" are not used in any models included in this service model.

   Example: C6011 100P PT | C6011 PT | R6097 PT

4. Jumper wires are used for WA10, WA5 etc and these are not supplied as replacement parts.

Signal Waveform Note

How to read Signal Waveform



① Connecting Point
② Volts/Div
③ Volts/Div
④ Connecting Point
⑤ Time/Div
⑥ Trigger Channel of the scope
(1:CH1,2:CH2)
⑦ Operation Mode of VCR
⑧ Waveform Point on Schematic
⑨ V1:Peak to Peak

Voltage Chart Note

Voltage Measurement
a. Color bar signal in SP mode.
b. ---:Unmeasurable or not necessary to measure.

Circuit Board Layout Note

Circuit Board Layout shows components installed for various models.
For proper parts content for the model you are servicing, please refer to the schematic diagram and parts list.

NOTE:
Circuit Board Layout includes components which are not used.

Model No. Identification Mark

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

Note : Refer to item 3 of Schematic Diagram Notes for mark "PT".

SCHEMATIC DIAGRAM & CIRCUIT BOAD LAYOUT NOTES
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

MAIN I SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

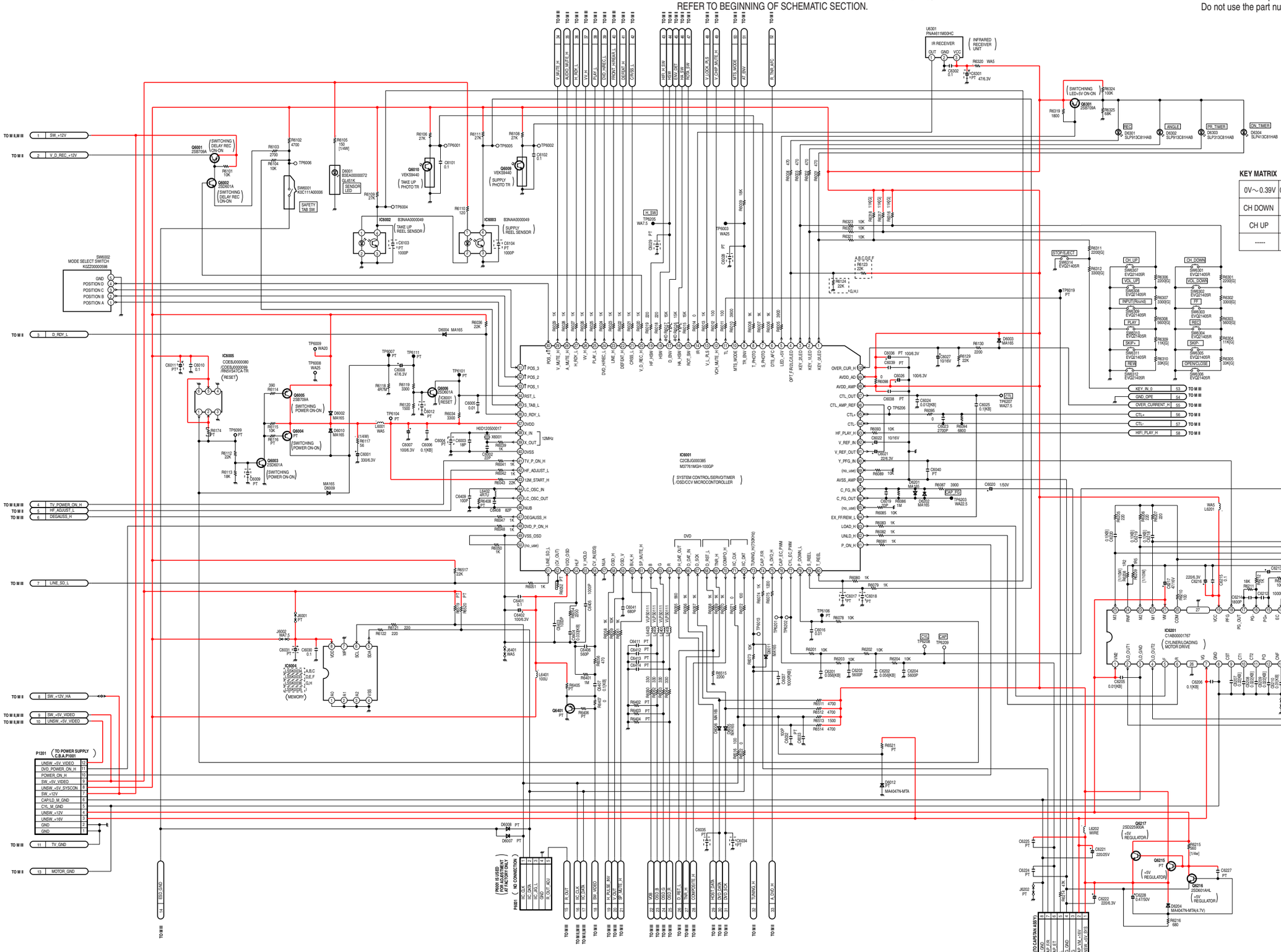
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

KEY MATRIX (SW6301~SW6312, SW6314, SW6381~SW6384)

0V～0.39V	0.4V～1.19V	1.2V～2.04V	2.05V～2.94V	2.95V～3.79V	3.8V～4.59V	TERMINAL VOLTAGE
CH DOWN	VOLUME DOWN	FF/CUE	REC	SKIP –	OPEN /CLOSE	OPERATION BUTTON
CH UP	VOLUME UP	INPUT	PLAY /REPEAT	SKIP +	REW /REVIEW	
-----	STOP /EJECT	DVD STILL	DVD STOP	DVD PLAY	POWER	

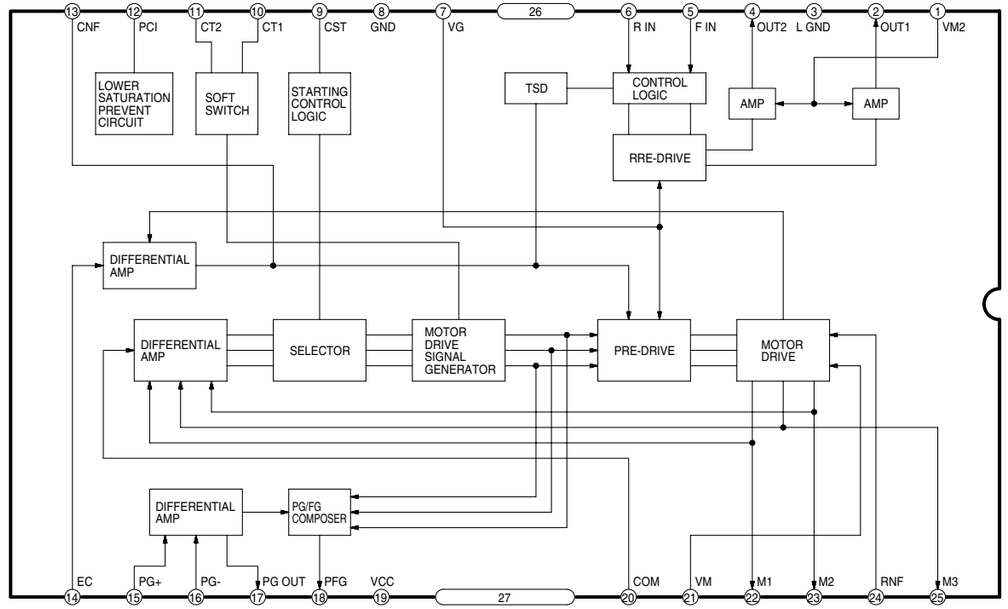

TO M II,M III
SW_+12V
V_D_REC_+12V
SWITCHING DELAY REC ON-ON
Q6001 2SB709A
Q6002 2SD601A
SWITCHING DELAY REC ON-ON
R6103 10K
R6102 4700
R6104 10K
TP6006
SW6001 K0C111A00006
SAFETY TAB SW
R6105 150 [1/4W]
D6001 B3EA00000072 GL451K SENSOR LED
R6106 27K
TP6001
Q6010 VEK9440 TAKE UP PHOTO TR
C6101 0.1
R6108 27K
TP6004
IC6002 B3NAA0000049 TAKE UP REEL SENSOR
C6103 PT 1000P
R6111 27K
TP6005
Q6009 VEK9440 SUPPLY PHOTO TR
R6110 120
IC6003 B3NAA0000049 SUPPLY REEL SENSOR
C6104 PT 1000P
C6102 0.1
TP6002
SW6002 MODE SELECT SWITCH K0ZZ00000098
GND
POSITION D
POSITION C
POSITION B
POSITION A
D_RDY_L
TO M II
TO M II,M III
TO M II
TO M II,M III
TO M II,M III
TO M II
TO M II
TO M II

I/O CHART OF IC6001

Pin No.	I/O	Signal Name	Description
1	I/O	KEY_0/LED	KEY DATA 0/ON-TIMER LED ON(L)
2	I/O	KEY_1/LED	KEY DATA 1/PROGRAM TIMER LED ON(L)
3	I/O	KEY_2/LED	KEY DATA 2/ANGLE LED ON(L)
4	O	OPT_F/R/2LC//LED	REC LED ON(L)
5	O	LED_+5V	LED+5V ON(L)
6	I	DTS_AFC	TUNER AFC
7	I	S_PHOTO	SUPPLY PHOTO TR ON(L)
8	I	T_PHOTO	TAKEUP PHOTO TR ON(L)
9	I	TR_ENV	ENV VOLTAGE
10	I	MTS_MODE	MTS MODE
11	O	TL	CAPSTAN TORQUE COMMAND
12	O	VCH_MUTE_H	V-CHIP MUTE(H)
13	O	V_L_PLS	V-LOCK PULSE
14	I	IR	IR-DATA
15	O	ROT_SW	ROTARY SW
16	O	HA_HSW	HEAD AMP SW
17	I	D_ENV	ENVELOPE DET
18	O	HSW	HEAD SW PULSE
19	O	HF_HSW	Hi-Fi HEAD SW
20	O	V_D_REC_H	VIDEO DELAY REC(H)
21	O	CRSS_L	CUE/REV/SS(L)
22	O	DEFEAT_H	AUDIO DEFEAT(H)
23	O	LINE_H	LINE1(L)/LINE2(H)
24	O	DVD_H/REC_L	DVD(H)/REC(L)
25	O	PLAY_L	PB(L)
26	O	VV_H	VV(H)
27	O	H_RDY_L	HOST READY(L)
28	O	A_MUTE_H	AUDIO MUTE(H)
29	O	V_MUTE_H	VIDEO MUTE(H)
30	I	POS_4	MODE SW POSITION D
31	I	POS_3	MODE SW POSITION C
32	I	POS_2	MODE SW POSITION B
33	I	POS_1	MODE SW POSITION A
34	I	RST_L	RESET(L)
35	I	S_TAB_L	SAFETY TAB ON(L)
36	I	D_RDY_L	DVD READY(L)
37	I	DVDD	VDD(+5V)
38	I	X_IN	12MHz OSCILLATOR
39	O	X_OUT	12MHz OSCILLATOR
40	-	DVSS	GROUND
41	O	TV_P_ON_H	TV POWER ON(H)
42	O	HF_ADJUST_L	HF ADJUST(L)
43	I	12M_START_H	12MHz CLOCK START(H)
44	I	LC_OSC_IN	LC OSCILLATOR
45	O	LC_OSC_OUT	LC OSCILLATOR
46	-	NUB	NOT USED
47	O	DEGAUSS_H	DEGAUSSING ON(H)
48	O	DVD_P_ON_H	DVD POWER ON(H)
49	-	VSS_OSD	GROUND
50	-	(no_use)	NOT USED

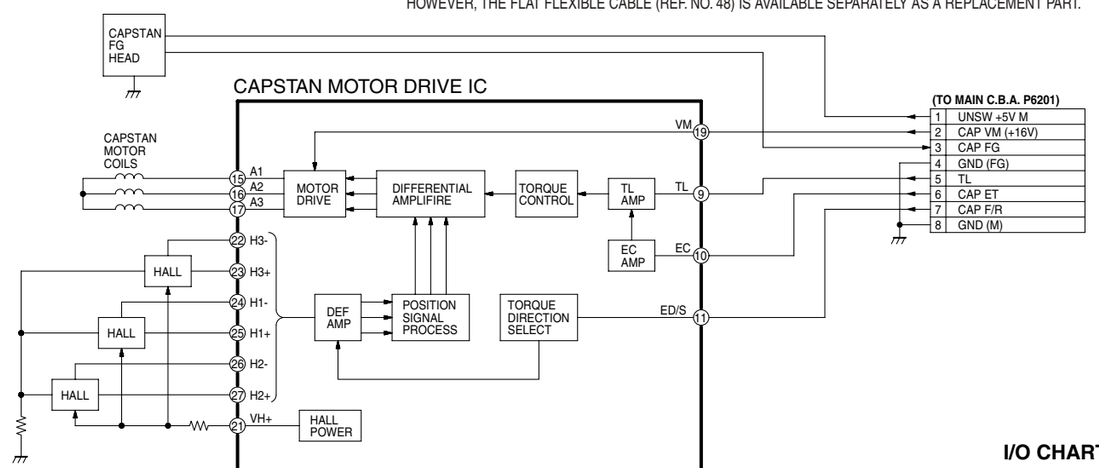
Pin No.	I/O	Signal Name	Description
51	I	LINE_SD_L	TV SIGNAL(L)
52	-	(CV_OUT)	NOT USED
53	I	VDD_OSD	VDD (+5V)
54	-	HLF	NOT USED
55	-	V_HOLD	NOT USED
56	I	CV_IN(EDS)	COMPOSITE VIDEO
57	-	NUA	NOT USED
58	I	OSD_H	OSD H-SYNC
59	I	OSD_V	OSD V-SYNC
60	O	BLK_H	BLANKING PULSE
61	O	SP_MUTE_H	SPEAKER MUTE(H)
62	O	B	OSD-B
63	O	G	OSD-G
64	O	R	OSD-R
65	O	H_DAT_OUT	DVD SERIAL DATA 0
66	I	D_DAT_IN	DVD SERIAL DATA 1
67	I	D_SCK	DVD SERIAL CLOCK
68	O	D_RST_L	DVD RESET(L)
69	O	TNR_H	TUNER(H)/LINE(L)
70	O	COMPO_H	COMPOSITE(H)
71	O	IIC_CLK	I2C SERIAL CLOCK
72	I/O	IIC_DAT	I2C SERIAL DATA
73	O	TUNING_H/(750KHz)	TUNER(H)/VV(L)
74	O	CAP_F/R	CAPSTAN MOTOR REVERSE(H)/FORWARD(L)
75	O	A_DVD_H	DVD AUDIO(H)
76	O	CAP_EC_PWM	CAPSTAN ERROR
77	O	CYL_EC_PWM	CYLINDER ERROR
78	I	P_DOWN_L	POWER DOWN(L)
79	I	S_REEL	SUPLLY REEL PULSE
80	I	T_REEL	TAKEUP REEL PULSE
81	O	P_ON_H	POWER ON(H)
82	O	UNLD_H	LOADING MOTOR REVERSE(H)
83	O	LOAD_H	LOADING MOTOR FORWARD(H)
84	O	EX_FF/REW_L	FF/REW(L)
85	-	(no_use)	NOT USED
86	O	C_FG_OUT	CAPSTAN FG
87	I	C_FG_IN	CAPSTAN FG
88	-	AVSS_AMP	GROUND
89	-	(no_use)	NOT USED
90	I	Y_PFG_IN	CYLINDER PG/FG
91	O	V_REF_OUT	V-REF
92	I	V_REF_IN	V-REF
93	I	HF_PLAY_H	Hi-Fi AUDIO PB(H)
94	I/O	CTL-	CONTROL PULSE(-)
95	I/O	CTL+	CONTROL PULSE(+)
96	-	CTL_AMP_REF	V-REF
97	O	CTL_OUT	PB CONTROL PULSE
98	I	AVDD_AMP	VDD (+5V)
99	I	AVDD_AD	VDD (+5V)
100	I	OVER_CUR_H	OVER CURRENT DETECT(H)

IC6201 CYLINDER/LOADING MOTOR DRIVE IC- DETAIL BLOCK DIAGRAM



CAPSTAN ASS'Y

NOTE:
CAPSTAN ASS'Y (REF. NO. 46) IS SUPPLIED AS A UNIT ONLY.
HOWEVER, THE FLAT FLEXIBLE CABLE (REF. NO. 48) IS AVAILABLE SEPARATELY AS A REPLACEMENT PART.



I/O CHART OF IC6001
/IC6201 DETAILBLOCK DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

MAIN II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

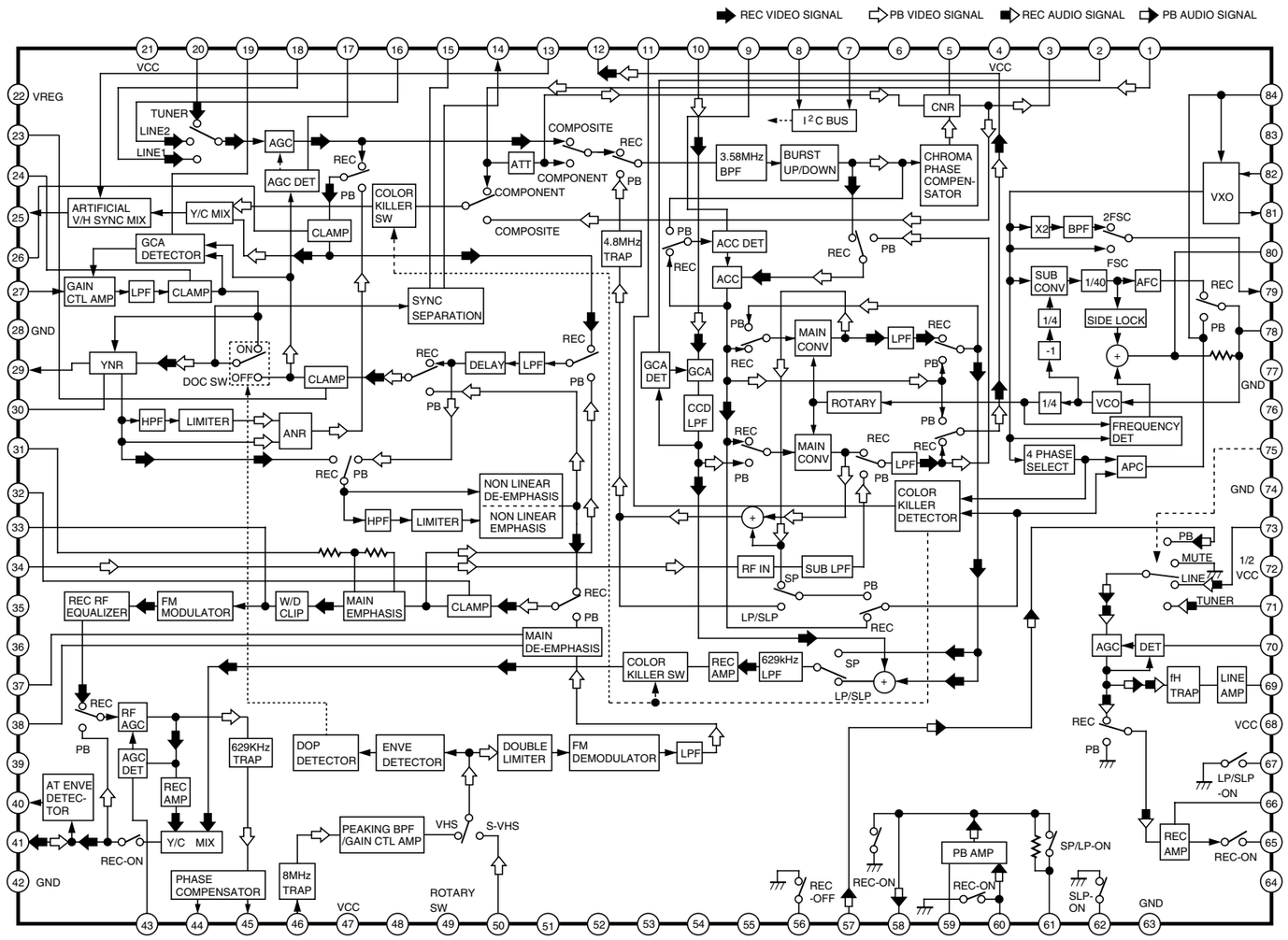
MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

REC VIDEO SIGNAL
PB VIDEO SIGNAL
REC AUDIO SIGNAL
PB AUDIO SIGNAL

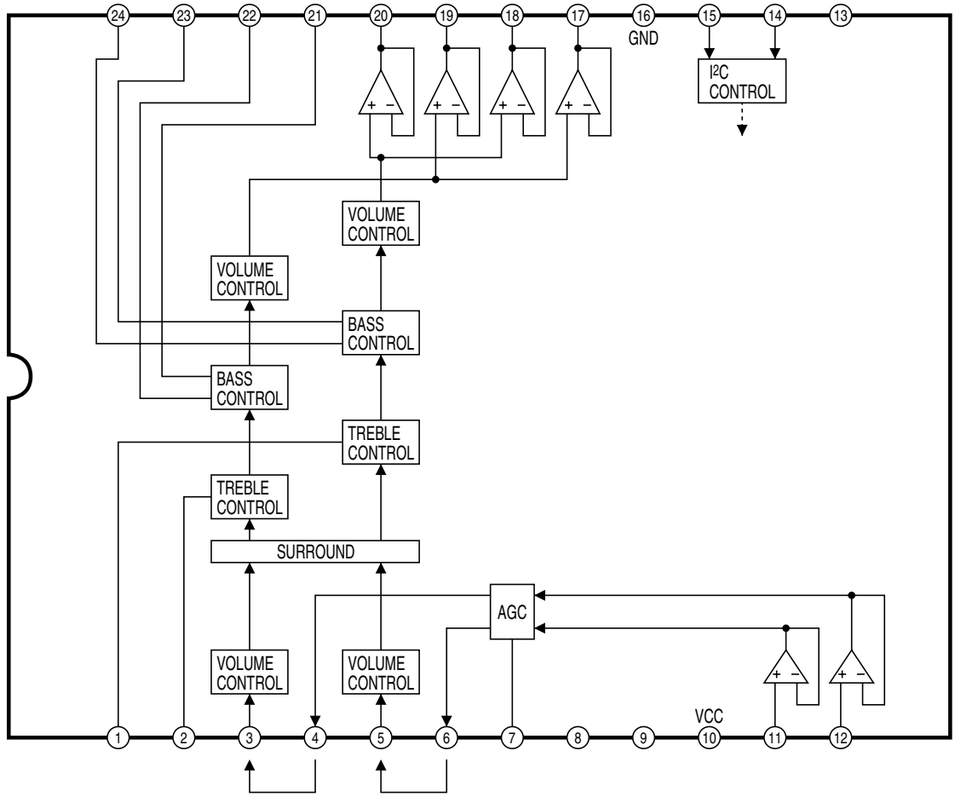
LINK TO VOLTAGE CHART

LSJB2132
MAIN II SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

IC3001 VIDEO/AUDIO SIGNAL PROCESS / HEAD AMP IC- DETAIL BLOCK DIAGRAM



IC4601 TONE CONTROL IC - DETAIL BLOCK DIAGRAM



IC3001 DETAIL BLOCK DIAGRAM
IC4601 DETAIL BLOCK DIAGRAM

PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

MAIN III SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

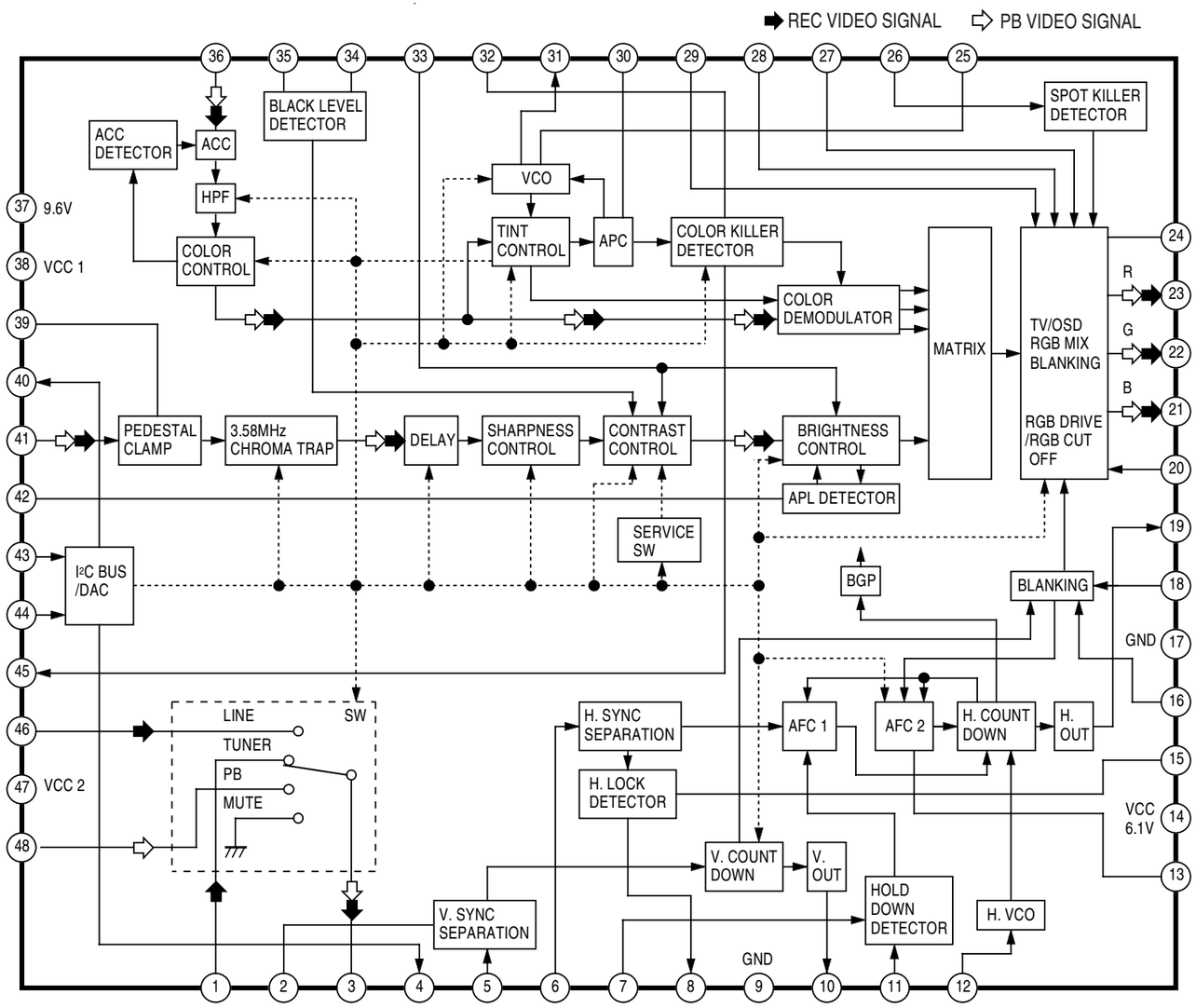
MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

REC VIDEO SIGNAL / PB VIDEO SIGNAL / REC AUDIO SIGNAL / PB AUDIO SIGNAL

LINK TO VOLTAGE CHART

LSJB2132
MAIN III SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K /PV-DF274/PV-DF2704/PV-DF2704-K

IC5301 LUMINANCE/CHROMINANCE PROCESS IC- DETAIL BLOCK DIAGRAM



AUDIO SCHEMATIC DIAGRAM

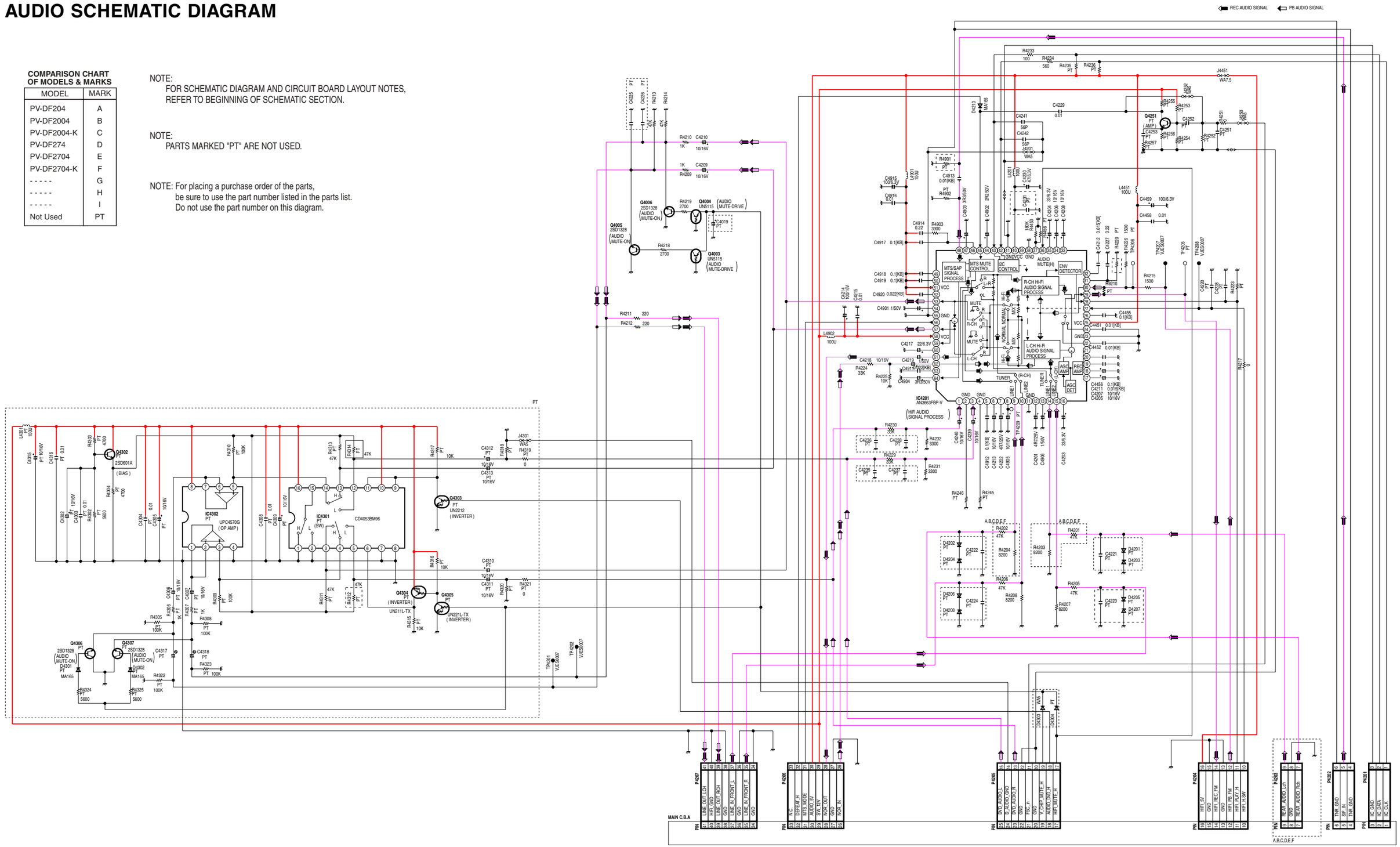
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

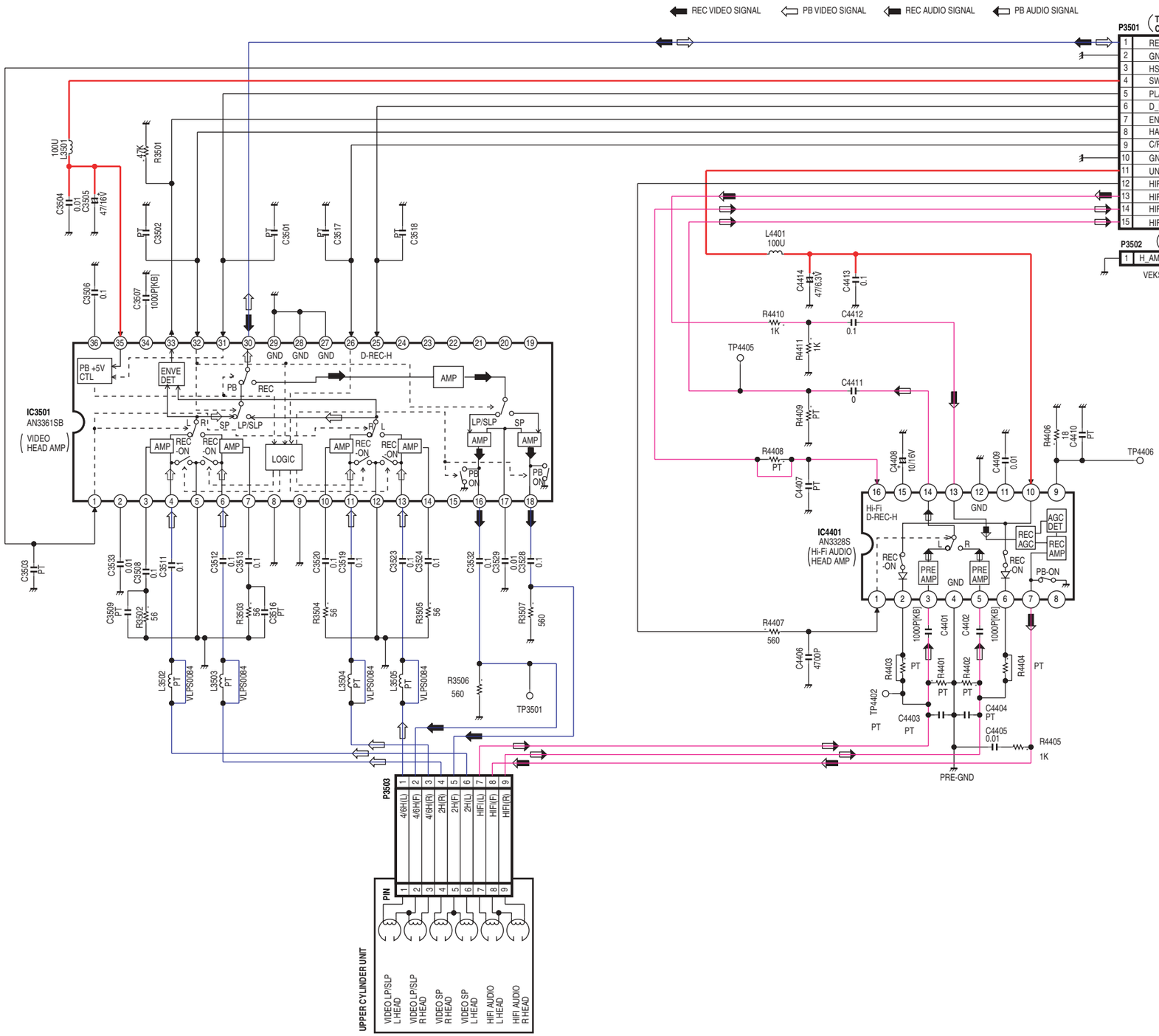
LSJB2133
AUDIO SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

Hi-Fi AUDIO/VIDEO HEAD AMP SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2141
Hi-Fi AUDIO/VIDEO HEAD AMP SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

TV MAIN I SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

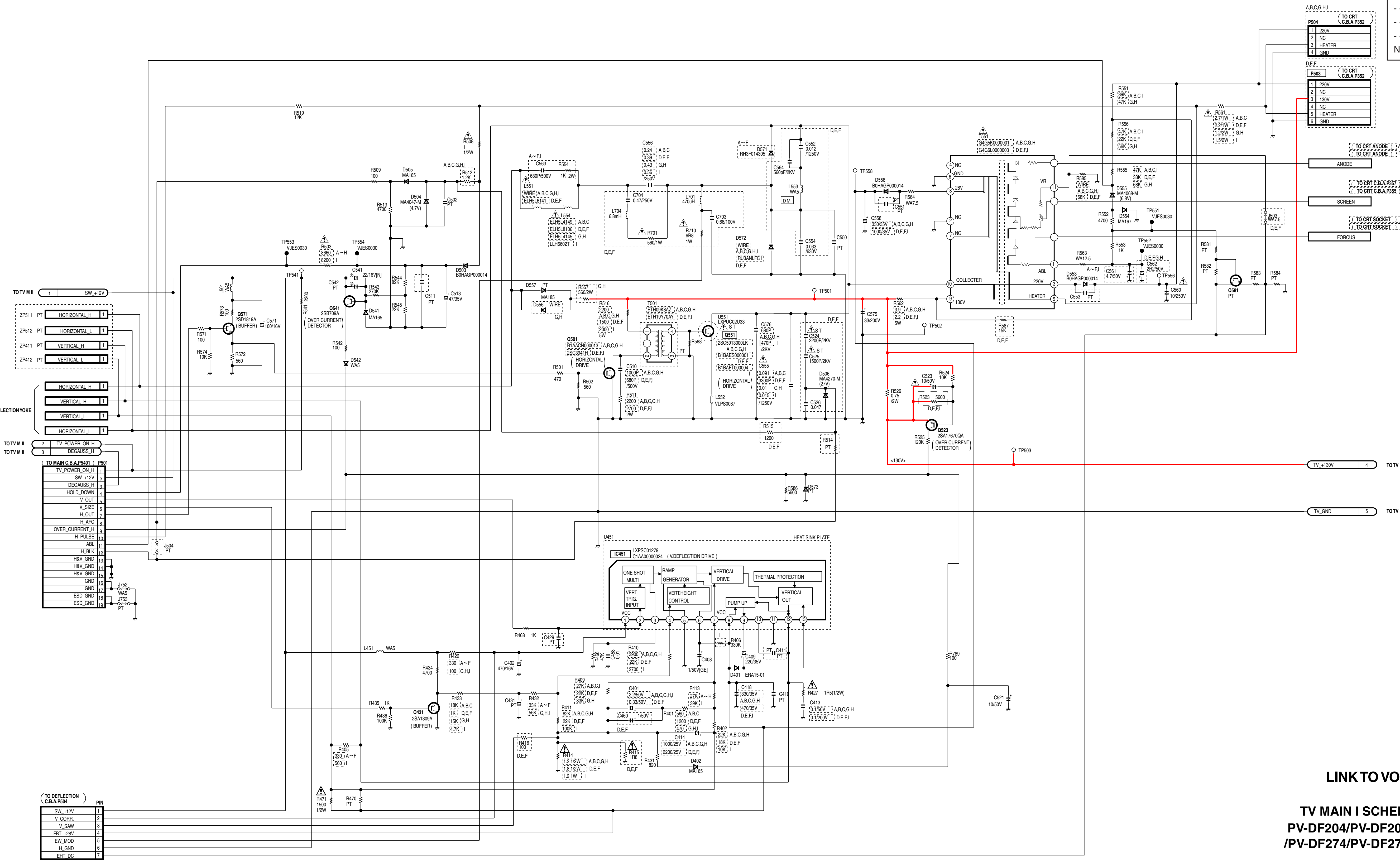
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



TO TV M II
SW_+12V
TO DEFLECTION YOKE
HORIZONTAL_H
VERTICAL_H
VERTICAL_L
HORIZONTAL_L
TV_POWER_ON_H
DEGAUSS_H
TO MAIN C.B.A.P5401
P501
HOLD_DOWN
V_OUT
V_SIZE
H_OUT
H_AFC
OVER_CURRENT_H
H_PULSE
ABL
H_BLK
H&V_GND
GND
ESD_GND
TO DEFLECTION C.B.A.P504
SW_+12V
V_CORR.
V_SAW
FBT_+28V
EW_MOD
H_GND
EHT_DC
Q571 2SD1819A (BUFFER)
Q541 2SB709A (OVER CURRENT DETECTOR)
Q501 B1AACN000013 A,B,C,G,H 2SC3941H D,E,F,I (HORIZONTAL DRIVE)
T501 ETH09K8AZ A,B,C,G,H ETH19Y70AY D,E,F,I
Q551 2SC5913000LK A,B,C,G,H B1BAES000001 D,E,F B1BAFT000004 I (HORIZONTAL DRIVE)
T551 G4G5K0000001 A,B,C,G,H G4G6L0000003 D,E,F,I
COLLECTER
HEATER
ABL
VR
TO CRT C.B.A.P352
P504
P503
220V
NC
130V
HEATER
GND
TO CRT ANODE
ANODE
TO CRT C.B.A.P357
TO CRT C.B.A.P355
SCREEN
TO CRT SOCKET
FORCUS
Q523 2SA17670QA (OVER CURRENT DETECTOR)
<130V>
TV_+130V
TV_GND
U451
HEAT SINK PLATE
IC451 LXPSC01279 C1AA00000024 (V.DEFLECTION DRIVE)
ONE SHOT MULTI
RAMP GENERATOR
VERTICAL DRIVE
THERMAL PROTECTION
VERT. TRIG. INPUT
VERT.HEIGHT CONTROL
PUMP UP
VERTICAL OUT
VCC
Q431 2SA1309A (BUFFER)

LINK TO VOLTAGE CHART

LSJB2151
TV MAIN I SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

TV MAIN II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

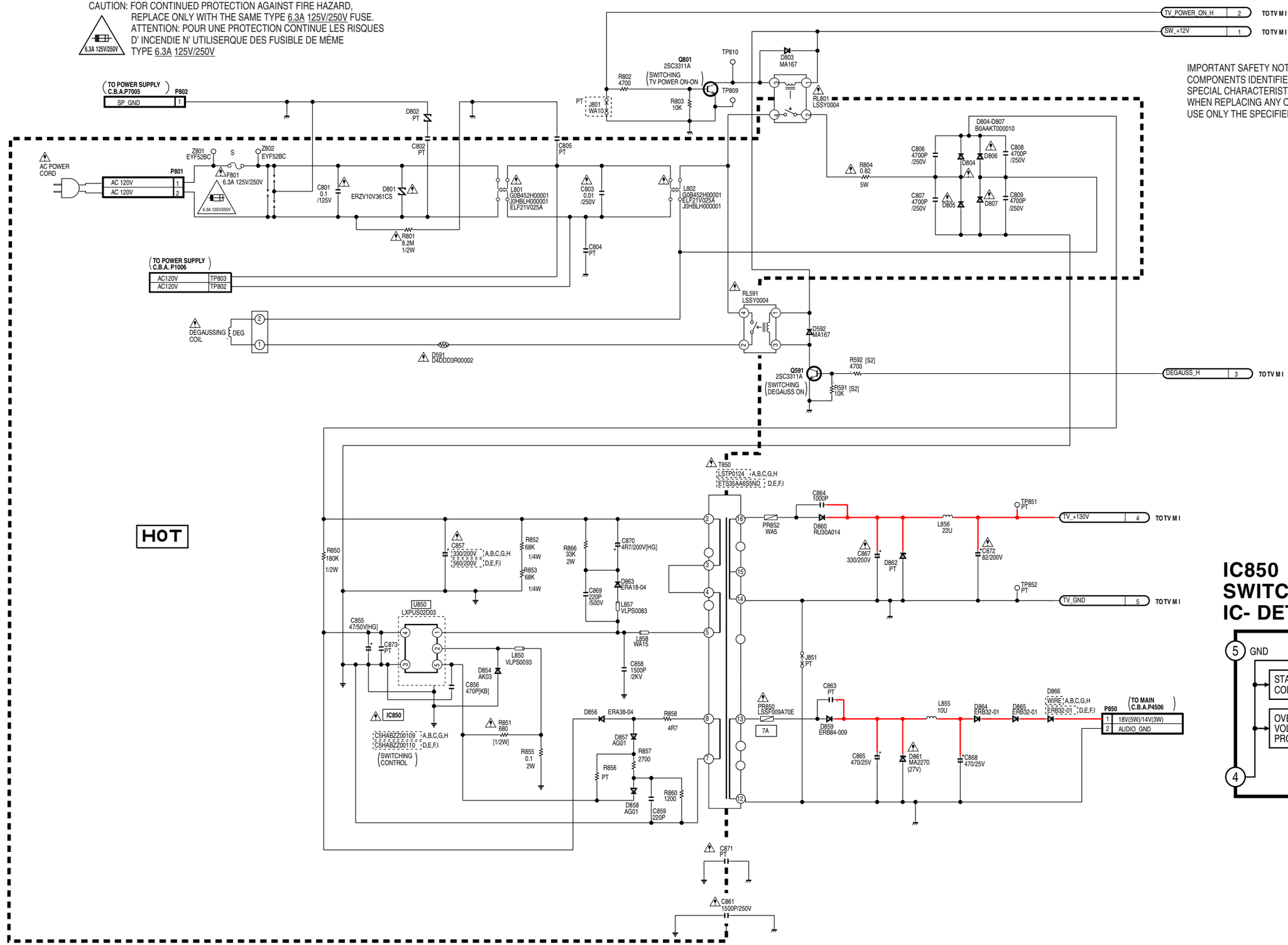
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

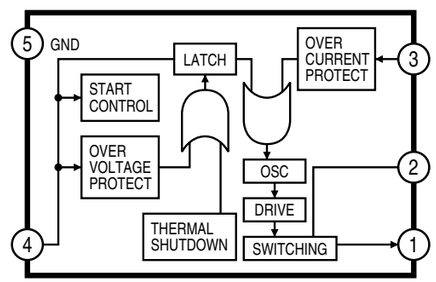
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 6.3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME TYPE 6.3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

HOT



IC850 SWITCHING CONTROL IC- DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART

LSJB2151
TV MAIN II SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K /PV-DF274/PV-DF2704/PV-DF2704-K

HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.

DEFLECTION SCHEMATIC DIAGRAM (D, E, F)

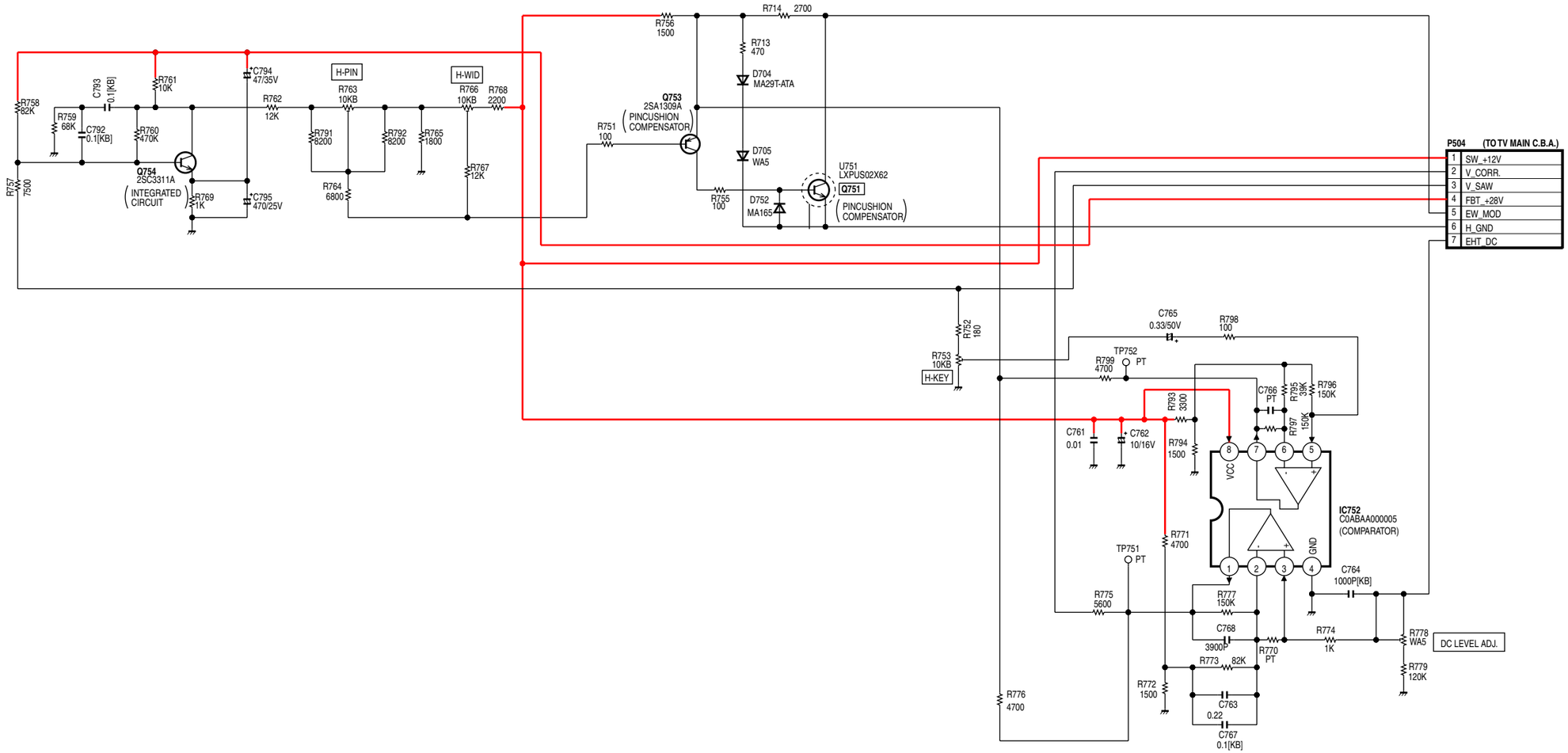
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



LINK TO VOLTAGE CHART

LSJB2075
DEFLECTION SCHEMATIC DIAGRAM

PV-DF274/PV-DF2704/PV-DF2704-K

POWER SUPPLY I SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

REC VIDEO SIGNAL | PB VIDEO SIGNAL | REC AUDIO SIGNAL | PB AUDIO SIGNAL

P7001 TEL302-5X ESD GND 1
P7006 TEL302-5X ESD GND 1
P7004 TEL302-5X SP GND 1
(TO TV MAIN C.B.A.P802) P7005 TEL302-5X ESD GND 1

TO P II 1 SW_+5V_VIDEO
TO P II 2 SW_+30V
TO P II 3 SW_+5V_AUDIO
TO P II 4 SW_+12V

U7001 (J3AAAB00001 / ENG37A1GF) A,B,C,D,E,F G,H,I (UHF/VHF TUNER)
NC NC NC NC NC NC NC NC NC CLOCK DATA AFT AUDIO_OUT SIF_OUT BTL NC VIDEO_OUT

L7001 10U
D7001 PT
C7006 39P
C7007 22P
C7008 10000P [KB]
C7009 PT
R7031 PT
R7033 1K
R7032 PT
R7030 1000
R7034 100
J7032 0
C7031 PT
Q7031 2SB709A (BUFFER)
C7032 0.01[KB]
C7033 10/16V
C7021 0.01[KB]
R7021 22K
Q7021 2SD1819A (BUFFER)
C7022 0.01[KB]
J7031 PT
R7022 27K
R7023 1800
D7003 PT
D7004 PT
L7002 100U

TP9554 WA7.5
TP9553 WA7.5

L9001 100U

IC9001 AN5832SA-E1 (FM SIGNAL PROCESS)
R9002 100
R9003 100
C9026 56P
C9027 56P
C9001 2R2/50V
R9001 180K
C9006 PT
C9008 100/6.3V
C9009 0.01
C9010 2R2/50V
C9011 4R7/50V
C9012 1000P[KB]
R9004 330
C9015 22
C9017 0.1[KB]
R9006 0.33/50V
C9002 10/16V
C9003 0.33/50V
C9004 3R3/50V
C9005 0.1[KB]
C9007 0.022[KB]
J9001 PT
C9013 0.1[KB]
C9014 0.33/50V
C9016 2R2/50V
C9021 2R2/50V
C9022 2R2/50V
TP9001 PT
TP9002 PT
R9005 1K
R9008 1K
C9020 PT
C9023 PT
C9019 0.01[KB]
C9024 0.01[KB]
C9025 PT 10/16V
Q9001 PT
Q9002 PT
Q9003 PT
R9009 PT

P7002 (TO MAIN C.B.A.P4003)

13	GND(ESD)
12	GND(ESD)
11	TNR_AFC
10	DTS_3S_CLK
9	DTS_3S_DATA
8	DEFEAT_H
7	GND(TNR)
6	GND(AUDIO)_OUT
5	LINE_OUT_R
4	GND(AUDIO)_OUT
3	LINE_OUT_L
2	GND(TNR)
1	TNR_VIDEO

P9501 (TO MAIN C.B.A. P4004)

1	GND(TNR)
2	SIF_IN
3	GND(TNR)
4	TNR_AUDIO_R
5	GND(TNR)
6	TNR_AUDIO_L
7	GND(TNR)
8	AUDIO_+6V
9	REAR_AUDIO_R
10	GND(AUDIO)
11	REAR_AUDIO_L
12	GND(VIDEO)
13	REAR_VIDEO

A,B,C,D,E,F

JK9501 AUDIO OUT RED WHITE
JK9502 AUDIO IN RED WHITE VIDEO IN YELLOW
J9501 PT
D9503 MA165
D9504 MA165
D9507 MA165
D9508 MA165
D9505 MA4051-M (5.1V)
D9506 MA4051-M (5.1V)
D9509 MA4120-L (12V)
D9510 MA4120-L (12V)
D9511 MA4120-L (12V)
D9512 MA4120-L (12V)
D9513 PT
D9514 PT
D9515 PT
D9516 PT
R9501 75
TP9552 WA5
R9502 5600
C9502 10/16V
C9501 PT
TP9551 WA5
R9503 5600
C9504 10/16V
C9503 PT
J9502 WA5
J9503 PT
J9504 PT
R9504 47K
R9505 47K
IC9501 C0ABBB000256 (OP AMP)
L9501 100U
R9506 4700
Q9501 2SD1819A (BIAS)
C9505 0.01
C9506 10/16V
C9507 PT
C9508 PT
R9507 4700
R9508 5600
C9509 0.01
C9510 10/16V
TP9501 WA7.5
J1201 PT

LINK TO VOLTAGE CHART

LSJB2155
POWER SUPPLY I SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K /PV-DF274/PV-DF2704/PV-DF2704-K

POWER SUPPLY II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

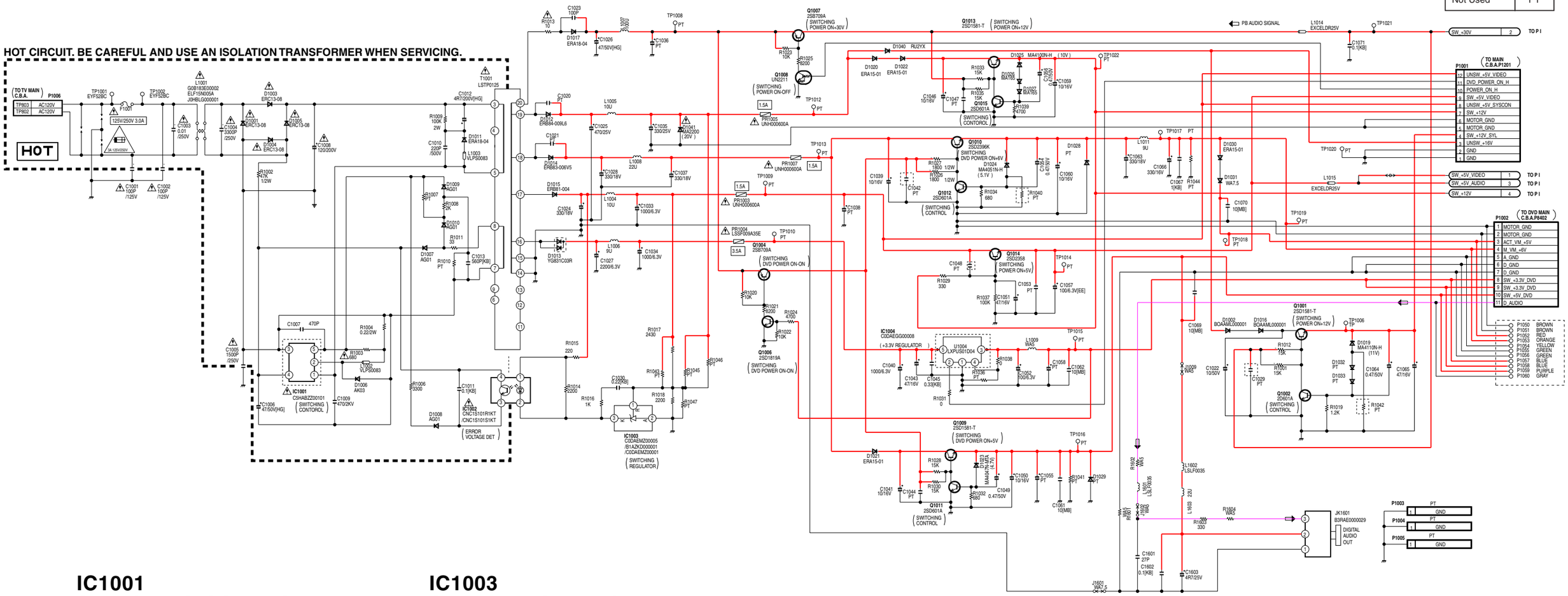
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

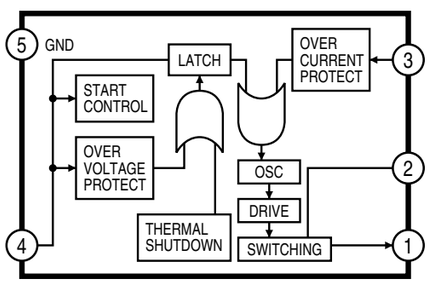
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME TYPE 3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

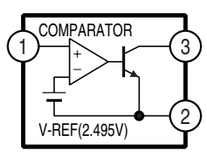
HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.



IC1001
SWITCHING CONTROL
IC- DETAIL BLOCK DIAGRAM



IC1003
SHUNT REGULATOR
IC- DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART

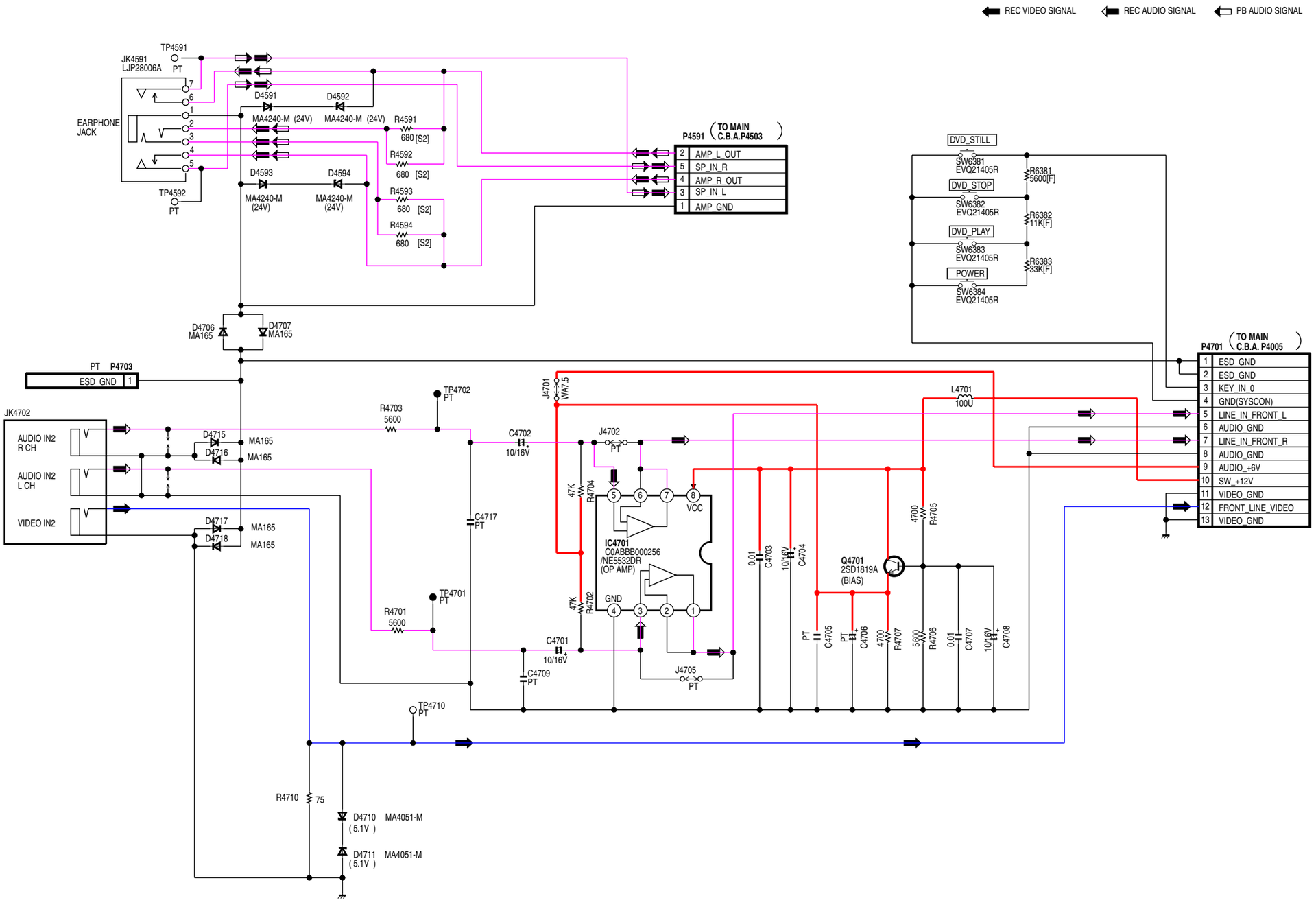
LSJB2155
POWER SUPPLY II SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

OPERATION SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2153
OPERATION SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K
/PV-DF274/PV-DF2704/PV-DF2704-K

CRT SCHEMATIC DIAGRAM (A, B, C, G, H, I)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

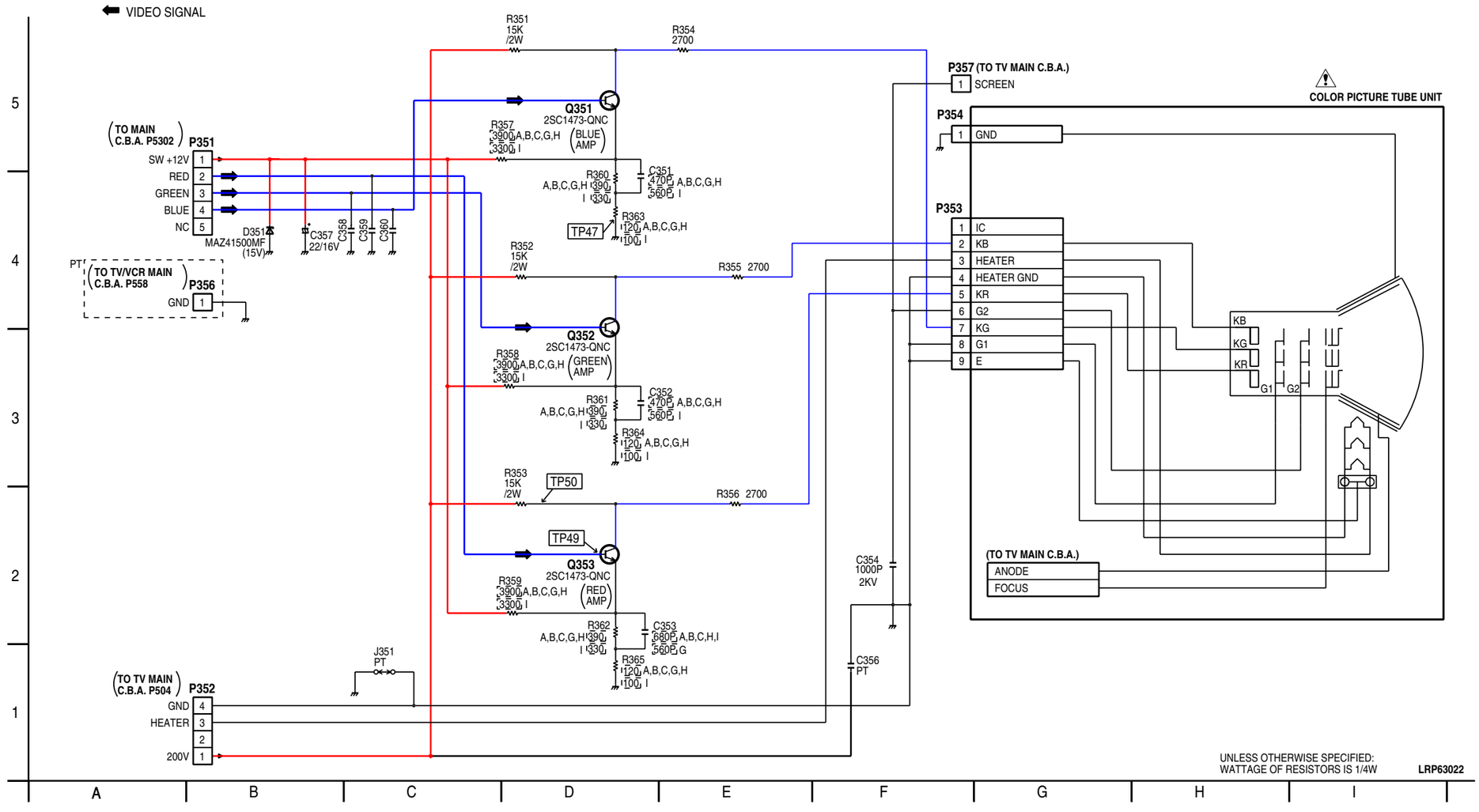
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT



LINK TO VOLTAGE CHART

LRP63022
CRT SCHEMATIC DIAGRAM
PV-DF204/PV-DF2004/PV-DF2004-K

CRT SCHEMATIC DIAGRAM (D, E, F)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

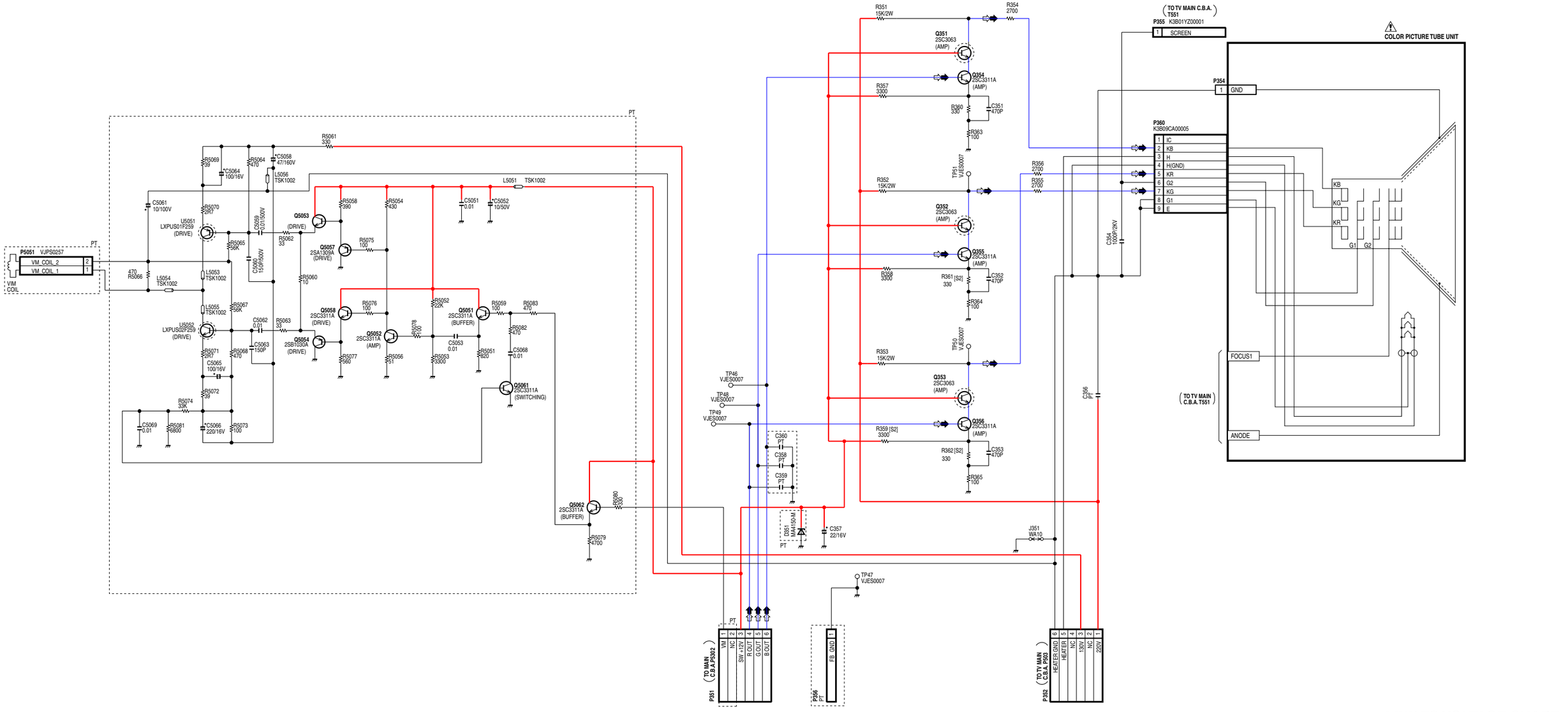
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-DF204	A
PV-DF2004	B
PV-DF2004-K	C
PV-DF274	D
PV-DF2704	E
PV-DF2704-K	F
- - - - -	G
- - - - -	H
- - - - -	I
Not Used	PT

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

⬅ REC VIDEO SIGNAL ⇦ PB VIDEO SIGNAL



LINK TO VOLTAGE CHART

LSJB2079
CRT SCHEMATIC DIAGRAM
PV-DF274/PV-DF2704/PV-DF2704-K